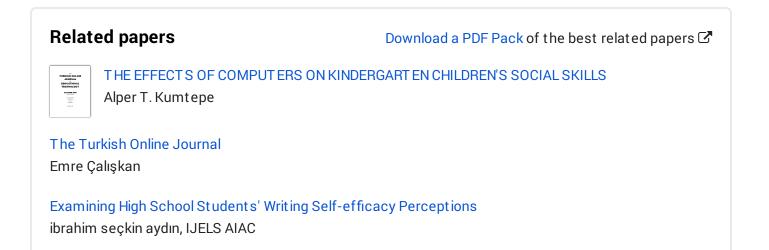
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ABSTRACT

The objective of this study is to examine the relationship between the writing quality and self-regulation skills of secondary education students. In the context of this study, the students were given 16 composition subjects, and they were asked to write a composition about the subject they chose. Then, the students were asked to write another composition about the same subject one hour and one day later. The "Writing Quality Scale" was used in the assessment of the compositions of the students. The composition skills and the habits of reading and using social media were also investigated in the study. Upon examining the results of the study, it was concluded that there is a high level of positive correlation between the writing skills and self-regulation skills and book reading habits of the students. In addition to this, it was seen that there was a high level of correlation between the self-regulation skills of secondary education students and the compositions they wrote in terms of writing quality. This shows that both the self-regulation and writing skills of the students can be developed through writing activities.

Keywords: Written expression, self-regulation, writing quality, book reading habit.

INTRODUCTION

Upon examining the literature, studies examining the relationship between the writing skill and self-regulation skill are encountered. While there are many studies carried out on the writing skill and self-regulation skill in the foreign literature, it is seen that such studies are not at the desired level yet in Turkey. It is believed that the present study will contribute to the field in that it reveals the relationship between the writing skills and self-regulation skills of the secondary education students. In addition to this, it is among the primary studies that examine the relationship between the scores that students took from three compositions they wrote at the intervals of one hour and one day in terms of writing quality and self-regulation skill, book reading habit and the habit of using social media.

Today, the objective of education is to ensure that students achieve reliable information and undertake the responsibility of their learning in this process rather than transferring certain information to students. Hence, the students will be able to control their own learning processes, achieve information without depending on their teacher, and question the reliability of the information they achieve. This makes the learning approach based on self-regulation important. When the relevant literature is examined, studies examining the effect of the writing training based on self-regulation on the writing skill are encountered (Dilber, 2014; McCoy, 2013; Sperger, 2010; Tracy, Reid and Graham, 2009; Uygun, 2012; Zumbrunn, 2010; Zumbrunn and Bruning, 2013). The common point of these studies is that the learning approach based on self-regulation has a positive effect on the writing skills of students. This shows that the writing skills of students can be developed by ensuring that they gain self-regulation skill.

The writing training is held for the purpose that students gain the skill to express their emotions and thoughts in a neat and orderly manner both in terms of grammar rules and content. Thus, writing quality is possible if the text is successful both in terms of form and content. Upon investigating the studies carried out in the field of writing training, it is seen that the problems related to grammar mistakes, incoherencies and the formal structure of the



text in students' compositions are assessed, however, the elements that make up the basis of the text such as ensuring proper transition between the sentences and paragraphs, that the text is coherent as a whole, the main idea is expressed properly and supported with supporting ideas are not emphasised sufficiently. The students should be able to manage the writing process well both in formal and semantic terms. Writing training based on self-regulation is among the important methods that can be used in developing the writing skills of the students. This study aims to examine the relationship between the writing skills and self-regulation skills of the students. The theoretical and conceptual framework of the study carried out starting from the problem situation is explained below.

Self-Regulation and Writing

The main reason for the concept of self-regulation to be in the centre of the writing skill is the studies carried out on the brain. Studies on the brain have shown the biggest advancement among the scientific studies carried out in recent years. It is for this reason that science men consider the years between 1990 and 2000 as the "Decade of Brain" (Andreasen, 2014:11). These studies have led to the emergence of a lot of important information both in regard to the anatomical structure of the brain and the biological structure of our nervous system. Hence, it has been possible to obtain more information about our education system, thinking structure and other mental activities (Stillings et al., 1994: 270).

That our brain structures and the working styles of our brains are not the same is among the most important elements in these findings. It was found out that our brain structures are not similar just like our voices and fingerprints are not similar (Calvin and Ojeman, 2009: 27). When it comes to the effects of these brain differences on language skills: brains are not the same in terms of their structure, and they are not the same in terms of their functions either. For example, we store the language skill in different areas using different regions for different components from names to predicates and different aspects of grammar (Medina, 2010: 65).

Genetic differences are among the important factors among the reasons for our brain structures not to be similar. Furthermore, while five main factors are effective in the development of our brain structures, our memory and the information we store let us think, perceive and interpret things differently from one another in our daily life. While these differences are effective in the development of our speaking skills, our unique writing styles are also effective in the development of our writing skills that have a more complex structure. The conceptual dimension of the concept of self-regulation has been revealed by these recent studies on the brain. At the same time, the development in our brain structure shows certain basic differences in the process of forming the connections between the neurons as well as being anatomical. It was found out that the connections between the neurons that manage our mental functions in our brain systematically develop up to 25 years of age (Andreasen, 2011: 91).

This information has shown that the students must rearrange their brain structures with a systematic and new method as well as their language skills in addition to all of their skills in language education. It is necessary to create a three-stage language and expression lesson systematics in order to adapt this information to the teaching of the writing skill. The first of these is to create awareness among the students, the second one is to develop activities and methods that will contribute to student's getting to know themselves correctly, and the third and last stage is to ensure that they find their unique writing method and develop it with practice. According to the findings of the new science field of self-regulation called "Cognitive Science", this information constitutes its scientific basis.

Another field that has important effects on the development of the concept of self-regulation is text linguistics. Text linguistics studies have shown that the structural integrity of a text shows numerical variabilities. This variability has clear properties even in the texts written by the same person at different times. This information shows that there is an interesting connection between the semantic integrity and writing skills and mental processes. Our study includes a field research carried out in order to show this interesting structure.

There are different approaches and definitions in the literature regarding the concept of self-regulation. Aydin and Atalay (2015) define self-regulation as an individual undertakes the responsibility of one's own learning process, plans and controls this. At the same time, Zimmerman (2000) and Zimmerman and Cleary (2006) express self-regulation as a combination of the thoughts, emotions, and acts that are produced by the individual himself/herself in order to attain an objective. Pintrich (2004) defines self-regulation as a process in which students are active participants in the learning process, can define their own targets and strategies, monitor and regulate them and can control their own motivation and behaviours. Steffens (2006) defines self-regulation in three steps: planning the learning activities, realization and observation of the learning activities, and evaluating the results of the learning activities. Starting from the above-mentioned definitions, observing, controlling and



assessing the activities performed in order to achieve one's target in the learning process show that the student has self-regulation skills.

Learning based on self-regulation, in which students actively participate in the learning process and regulate their own learning according to their needs, is defined as the emotions, thoughts, and actions presented in order to achieve a particular academic target (Zimmerman, 2000). It is necessary to raise individuals who undertake the responsibility of the writing training, can control their own writing processes and actively participate in these processes, rely on their own skills and positively use these skills. One of the important elements in achieving this target is self-regulation based learning (Özbay and Daşöz, 2016).

Self-regulation based learning can be considered as for an individual to undertake the responsibility of one's own learning process and design one's education process in line with one's own needs and necessities. Here, it can be said that a person undertakes all of the responsibility of one's own learning process and designs the learning process actively. Furthermore, the belief of an individual is also an important factor in self-regulation based learning. Studies carried out show that cognitive and motivational factors have an important role in the self-regulation skill (Pintrich, 2004; Zimmerman, 2008; Schunk and Zimmerman, 2007). Students with the self-regulation skill have high interest and motivation towards learning as their belief that they can ensure their own personal development is high.

Today, it is quite easy to access the information thanks to the developments in technology, however, the rapid change in the information has brought about the problem of whether the information accessed is reliable. It is necessary to have high order thinking skills such as critical thinking, creative thinking and problem-solving in order to eliminate this problem. It can be said that the students with the self-regulation skill also have good high order thinking skills. Indeed, the studies on this subject show that there is a high level of relationship between the self-regulation skill and high order thinking skills and learning based on self-regulation has positive effects on the high order thinking skills of the students (Arslan, 2014; Canca, 2005; Çiftçi, 2012; Oruç, 2012; Vandevelde et al., 2011). Today, it is necessary to raise individuals who can undertake the responsibility of their own learning, determine and update their learning process in line with their own needs. This necessitates benefiting from the learning based on self-regulation skills is also an active problem solver and aims to develop one's skills (Nami et al., 2012).

Providing the students with writing skills will facilitate the transfer of the information that they previously obtained by reading or listening, and the students will be able to build their written expression in a more systematic and orderly manner. This will ensure that the text is a whole both on the surface and in deep structure. The writing strategy based on self-regulation may help students develop their skills in planning, writing and correcting, which ensure that they maintain their control on particular writing strategies, writing and learning (Zumbrunn, 2010).

Considering problems such as negative attitude towards writing and the anxiety of writing, it is necessary to perform the studies on teaching writing in a more systematic way and use different methods and techniques in teaching writing. One of these methods is the writing training based on self-regulation. Graham, Harris and Mason (2005) state that through the learning strategy based on self-regulation, students can obtain planning and self-regulation skills, which are necessary to regulate their writing studies, better understand the writing process and use the strategy taught.

Writing based on self-regulation is defined as the thoughts, emotions and acts that are used by students in order to achieve different writing targets, through which they can control the writing process (Kaplan, Lichtinger and Margulis, 2011; Schunk and Zimmerman, 2007). In the process of writing, students should control their writing process in addition to expressing their emotions and thoughts with proper sentences within a particular plan. This can be achieved by using the writing strategy based on self-regulation. Students with self-regulation skill are students who are aware of their writing and reading strategies, know which strategy to use in which case, and perform the things they need to do by the end of the writing process in a planned and systematic way. Self-regulation is a skill that can be brought to the students later. In this sense, the education and teaching activities at schools should be arranged in accordance with self-regulation (Zimmerman, 2002).

We are currently performing a study at the doctorate thesis level on developing the writing skill through the selfregulation method. The studies on the control group taught using the traditional writing method with a group that was educated on self-regulation at the research dimension of the doctorate thesis we made at Gazi University Institute of Education Sciences were completed, and the statistical measurements of the results obtained show



that the writing training held with the self-regulation method yields significantly positive results. The research stage is over, however, the thesis is still being written.

Objective of the Study

The objective of this study is to reveal the relationship between the writing qualities and self-regulation skills of secondary education students. The answers to the following questions were sought in the framework of this general objective:

1. What is the level of the writing skills of the students when compared to the high schools where they studied? 2. Are the first, second and third compositions of the students different in terms of attention, arrangement, and ordering of the information?

3. Are the self-regulation skills of the students different in terms of the first, second and third compositions?

4. Is there a relationship between the writing skills and the self-regulation skill, book reading habit and social media using habits of the students?

5. To which extent do the self-regulation skill and book reading habit predict the writing skill?

METHODOLOGY

Research Model

The research was designed as a mixed method study. Students were given sixteen composition subjects and asked to write a composition about one of these subjects in order to determine the writing skills of secondary education students. Then, the students were asked to write another composition on the same subject one hour and one day later. The document review technique, which is among qualitative data collection techniques, was used in order to assess the written expressions of the students. The document review includes the analysis of the written materials on the phenomenon or phenomena that are aimed to be investigated (Yıldırım and Şimşek, 2013: 187). The relationship between students' writing skills, self-regulation skills, book reading habits and habits of using social media was also examined in the study. The relational screening model among qualitative research methods was also used in the study in order to reveal these relations. The relational screening model is a research model that aims to determine the existence and/or degree of the covariance between two or more variables (Karasar, 2005: 81).

Working Group

The universe of the study carried out in the 2015-2016 academic year consists of the 12th-grade students studying in the city centre of Kırşehir. The study was conducted with the data obtained from 126 students that were chosen through stratified sampling among the 12th-grade students. Stratified sampling is a method of sampling that determines the sub-groups in the universe and ensures that these are represented in the universe with their ratio in the size of the universe (Büyüköztürk et al., 2015: 87). While the characteristics rates of the individuals that are randomly chosen in the universe can be the same, these rates may also be different; stratification secures the state of representation in this subject (Creswell, 2014: 159).

For this reason, the high schools in the city centre of Kırşehir were determined as a sample in accordance with their ranking of success starting from their TEOG test results. In this context, the Science High School, Ahi Anatolian High School, Hayriye Kımçak Anatolian High School, the Religious High School, Kırşehir High School and Âşıkpaşa Vocational and Technical Anatolian High School were determined as the study high schools. Then, the number of the students studying at these high schools was determined in order to be able to determine the number of the students to be included in the study, and the study group was determined in percentage by the total number of high school students for the purpose of ensuring that each high school is equally represented. Consequently, 18 students from the Science High School, 21 students from Ahi Evran Anatolian High School, 20 students from Hayriye Kımçak Anatolian High School, 21 from Anatolian Religious High School, 24 from Kırşehir High School, and 22 students from Âşıkpaşa Vocational and Technical Anatolian High School were included in the study.

Data Collection Tools

The data required for the research were collected using the "Writing Skill Assessment Scale" prepared starting from Turkish Teaching Program (2006), the personal information form prepared by the researcher and the "Self-Regulation Scale" adapted into Turkish by Aydin et al. (2014).

Personal Information Form: It is prepared so as to collect data on the independent variables of the research, and consists of five questions.



Writing Skill Assessment Scale: The rubric-style scale prepared by the researchers based on Turkish Teaching Program (2006) is prepared in order to assess the written expressions of the students. It consists of six items: The title is related to the subject. The subject is explained in logical consistency and integrity. There is an appropriate transition between the paragraphs. A single emotion and thought are handled in each paragraph. The main idea that is desired to be given is achieved in the text. The main idea and emotion are supported with auxiliary ideas, and the result expression concludes the subject and is impressive. A formula of a=Range/Number of Groups to be Formed was used in the determination of the value interval of the scale (Taşdemir, 2003). Accordingly, the value interval was determined at the following levels: "1-4 "inadequate (1,00-1,75), intermediate (1,76-2,50), good (2,51-3,25), very good (3,26-4,00)".

The "concordance between independent observers" method was used in order to determine the reliability of the measurement scale used in the study. The concordance between independent observers is a criterion of security that is applied when more than two observers try to measure the same thing independently (Karasar, 2005: 149). Accordingly, thirty randomly selected written expression papers were assessed by the researcher, one Turkish teaching and one Turkish language and literature expert. Then, the relations between these values were determined using the Pearson's correlation analysis. As a result of the analysis, it was found that the Pearson's correlation coefficient showing the rate of concordance between the observers in the written expressions of the students is r=,84. That the Pearson's correlation coefficient is between ,70 and ,89 shows a high, and above ,90 shows a very high level of relation (Kalaycı, 2009: 116).

Self-Regulation Scale: The Self-Regulation Scale developed by Brown, Miller and Lawendowski (1999) in order to measure behavioural self-regulation was adapted into Turkish by Aydın et al. (2014). The scale consists of three factors and 51 items. The first factor, self-reinforcing, consists of 29 items; the second factor, self-monitoring, consists of 18 items; and the third factor, self-assessment, consists of 4 items. The Self-Regulation Scale was applied to 321 university students outside the sample in order to determine the fitness of the model. The model fitness values were determined by the researcher using the confirmatory factor analysis. The results obtained are as follows: x2/df= 1,93; RMSEA= 0,072; SRMR= 0,065; GFI= 0,88; AGFI= 0,89; CFI= 0,94; IFI= 0,93 and NNFI= 0,95. Furthermore, the internal consistency level of the scale was examined using the Cronbach's Alpha coefficient, and it was found as α =,831.

Data Analysis

First, the fitness of the data for the normal distribution was examined in order to determine the statistical method to be used in the study. The Kolmogorov-Smirnov normal distribution test was performed as the number of the data is higher than 50 in order to test the fitness of the data for normal distribution (Wright, 2006: 94). As a result of the normal distribution test, it was determined that the value of significance is higher than 0,05, and it was decided that the data show normal distribution considering the kurtosis and skewness coefficients, and the histogram graph (Kalaycı, 2009: 6-10). For this reason, the one-way variance analysis (ANOVA) was used in order to determine whether the writing skills of the students vary by the high schools where they study and their first, second and third written expressions. In addition to this, the Pearson's Moments Correlation Coefficient (r) was calculated in order to determine the writing skills of secondary education students and other variables. Furthermore, the Multiple linear regression analysis was performed in the analyses aimed at predicting the writing skills of the students. The Standardized Beta (β) coefficient and the t-test results on its significance were taken into consideration in the interpreting of the regression analysis.

IBM SPSS 20 program was used for the analysis of the data, LISREL 8,80 program in the confirmatory factor analysis of the Self-Regulation Scale, and the significance level of 0,05 was sought in the interpreting of the data.

FINDINGS

This section focuses on the findings based on the data collected in line with the sub-problems of the study. Table 1 features the statistical values concerning the scores obtained by secondary education students with regard to their first, second and third expressions.



Variable	High School Type	n	\overline{X}	Ss
1 st Written Expression	Science High School Ahi Anatolian High School Hayriye Kımçak Anatolian High School Kırşehir Anatolian Religious High School Kırşehir High School Âşıkpaşa Technical High School	18 21 20 21 24 22	3,44 3,28 2,95 2,80 2,37 2,22	,615 ,783 ,887 ,749 ,923 1,151
2 nd Written Expression	Science High School Ahi Anatolian High School Hayriye Kımçak Anatolian High School Kırşehir Anatolian Religious High School Kırşehir High School Âşıkpaşa Technical High School	18 21 20 21 24 22	3,38 3,14 2,70 2,71 2,33 2,13	,607 ,853 ,864 ,717 ,916 1,125
3 rd Written Expression	Science High School Ahi Anatolian High School Hayriye Kımçak Anatolian High School Kırşehir Anatolian Religious High School Kırşehir High School Âşıkpaşa Technical High School	18 21 20 21 24 22	3,55 3,33 2,95 2,85 2,20 2,09	,511 ,730 ,944 ,792 ,779 1,108

 Table 1: Average scores of secondary education students regarding their written expressions

While in Table 1, it is seen that the students of the Science High School have the highest score from the "Writing Skill Assessment Scale", the students of Kırşehir High School and Âşıkpaşa Vocational and Technical High School have the lowest scores. It is seen that the score obtained by the students in their second expression is lower when compared to their first expression scores. While the written expression scores of the Science High School and Ahi Anatolian High School are at the very good level, the scores of the students from Hayriye Kımçak Anatolian High School and Kırşehir Anatolian Religious High School are at the good, and the scores of the students from Kırşehir High School and Âşıkpaşa Vocational and Technical Anatolian High School are at the intermediate level. Table 2 shows the statistical values that the secondary education students obtained in terms of the attention, arrangement and ordering of the information in their first, second and third compositions.

Table 2: Statistical information regarding the structure of the first, second and third written expressions of
secondary education students

Configuration of the Parts that Form the Text	1 st Written	2 nd Written	3 rd Written	
Structure	Expression	Expression	Expression	
Compositions starting with the main idea	42	31	51	
With the main idea in the development part	26	15	21	
Compositions ending with the main idea	35	41	44	
Compositions starting with a question	12	8	9	
Compositions starting with an example	25	16	18	
Compositions starting with a quotation	9	5	7	
Those starting with a dialogue, story or anecdote	21	15	28	

Upon examining Table 2, it is seen that there are clear differences in the written expressions of secondary education students in terms of the attention, arrangement and ordering of the information in their first, second and third written expressions. Table 3 shows statistical data regarding the written skills, self-regulation skills, book reading habit and habits of using the social media in the first, second and third compositions written by secondary education students.

		Self- Regulation	1 st Written Expression	2 nd Written Expression	3 ^{ra} Written Expression	Book Reading Habit	Habit of Using Social Media	
Self-regulation	r	1	,679**	,649**	,733**	,521**	-,320**	
	р	1	,000,	,000	,000	,000,	,000,	
1 st Written	r	,679**	1	,926**	,956**	,396**	-,203*	
Expression	р	,020	1	,000	,000	,000	,023	
2 nd Written	r	,649**	,926**	1	,906**	,410**	-,167	
Expression	р	,000	,000	1	,000	,000	,061	
3 rd Written	r	,733**	,956**	,906**	1	,439**	-,249**	
Expression	р	,000	,000	,000,	1	,000	,005	
Book Reading	r	,521**	,396**	,410**	,439**	1	-,261**	
Habit	р	,000	,000	,000,	,000	1	,003	
Habit of Using	r	-,320**	-,203*	-,167	-,249**	-,261**	1	
Social Media	р	,000,	,023	,061	,005	,003	1	

Table 3: Correlation table between the writing skill and other variables

*. Correlation is significant at the 0.05 level. n=126

**. Correlation is significant at the 0.01 level.

When Table 3 is examined, it is seen that there is a high-level significant relationship between the writing skills and self-regulation skills of the secondary education students (r=,679, p<,01; r=,649, p<,01; r=,733, p<,01). While there is an intermediate level of relationship between the writing skill and book reading habit (r=,396, p<,01; r=,410, p<,01; r=,439, p<,01), there is a significant negative relationship between writing skills and the habit of using social media (r=-,203, p<,05; r=-249, p<,01).

Furthermore, it is seen that there is an intermediate level of significant relationship between the self-regulation skills and book reading habits of secondary education students (r=,521, p<,01). The negative significant relationship is observed between the self-regulation skill and the habit of using social media (r=-,320, p<,01). The graded regression analysis results on the prediction of the writing skills of the secondary education students by the variables are shown in Table 4.

students									
Predictor Variables	R	AR ²	Std. Error	R ² Change	F Change	F Regression	Beta	t	р
Self-regulation Book Reading Habit	,537 ,537	,533 ,541	,671 ,673	,533 ,008	143,579 ,220	143,579 71,448	,841 ,028	11,863 ,469	,000 ,640

When Table 4 is examined, it is seen that there is a significant relationship between the writing skill and self-regulation skill. These predictor variables explain 54,1% of the total variance in writing skills. The self-regulation skill explains the writing skills of the students at the rate of 53,3% of and the book reading habit at the rate of 0,8%.

DISCUSSION AND CONCLUSION

The results obtained in the study carried out for the purpose of determining the relationship between the writing skills and self-regulation skills of secondary education students are as follows with discussions.

It is seen that the writing skills of secondary education students vary by the high schools where they study. Upon examining the average scores of the "Writing Skill Assessment Scale", it is seen that the students of the Science High School have the highest score, while the students of Kırşehir High School and Âşıkpaşa Vocational and Technical Anatolian High School have the lowest scores. It is seen that the score obtained by the students from their second written expressions is lower when compared to their first written expression scores. This may have resulted from the fact that students wrote a second composition about the same subject. For, the students wrote the second text shorter; and this may be interpreted as the students did not pay much attention to their second composition.

While it is observed that the written expression scores of the students from the Science High School and Ahi Anatolian High School are at a very good level, it is seen that the scores of the students from Hayriye Kımçak Anatolian High School and Kırşehir Anatolian Religious High School are good, and of the students from Kırşehir High School and Âşıkpaşa Vocational and Technical Anatolian High School students are at the intermediate level.



It was concluded that there are clear differences in the written expressions of secondary education students in terms of the attention, arrangement and ordering of the information in their first, second and third written expressions. This shows that each student's writing skill develops differently. Thus, the writing strategy based on self-regulation shows that each student should regulate one's writing strategy according to one's own skills and habits rather than receiving a standard writing training.

It was concluded that there is a positive significant relationship between the writing skills and self-regulation skills of the students as a result of the Pearson's correlation analysis carried out in order to determine whether there is a significant relationship between the two. Accordingly, the relationship between the writing skills of secondary education students and their self-regulation skills are at the level of (1st written expression r=,679, p<,01; 2nd written expression r=,649, p<,01; 3rd written expression r=,733, p<,01). It is seen that there is a higher correlation between the third written expressions and self-regulation skills of the students. This means that the students with self-regulation skill can develop their writing skills by making writing practices.

Upon examining the literature, it is seen that learning activities based on self-regulation have a positive effect on the writing skill of the students (Dilber, 2014; McCoy, 2013; Sperger, 2010; Tracy, Reid and Graham, 2009; Uygun, 2012; Zumbrunn, 2010; Zumbrunn and Bruning, 2013). In addition to this, the studies in the relational screening model that examines the relationship between the self-regulation skill and writing skill also show that there is a high level of relationship between these two variables (Gouin, 2012; Sieben, 2013). This shows that the students' writing skills can be developed by bringing the students the self-regulation skill. If students have a high level of self-regulation skill, it will be possible for them to produce high-quality texts in terms of writing quality, for writing is an activity that the students plan themselves and manage the process actively (Sieben, 2013).

While there is an intermediate level of relationship between the writing skill and book reading skill (r=,396, p<,01; r=,410, p<,01; r=,439, p<,01), there is a negative intermediate level of relationship between the writing skill and the habit of using social media (r=-,203, p<,05; r=-249, p<,01). Accordingly, it can be said that the writing skill scores of secondary education students will increase in case their self-regulation skills and book reading habits increase. In addition to this, it can be also said that the writing skill scores of the students will increase as their habit of using social media decreases.

In his study, Eroğlu (2013) concluded that there is a relationship between the book reading habit and the writing skill, and students with book reading habit are also successful in their written expressions. Gouin (2012) also expresses that there is a high level of relationship between the self-regulation skill and writing skill.

The multiple linear regression analysis was performed in order to determine to which extent the self-regulation skills and book reading habits of secondary education students predict their writing skills. As a result of the analysis, it was concluded that there is a high level of significant relationship between the writing skill and self-regulation skill, while there is no kind of relationship between the writing skill and book reading habit. Accordingly, the self-regulation skill explains the writing skill of secondary education students at the rate of 53,3%, and book reading habit at the rate of 0,8%. Upon examining the standardized (β) coefficient and t-value, it can be said that the self-regulation skill can be a significant predictor of the writing skill.

REFERENCES

Andreasen, N. C. (2011). Yaratıcı Beyin, Deha'nın Nörobilimi. Ankara: Arkadaş Yayınları.

- Andreasen, N. C. (2014) Cesur Yeni Beyin, Genom Çağındaki Fetih: Ruh Hastalıkları. İstanbul: Okyanus Yayınları.
- Arslan, S. (2014). An investigation of the relationships between metacognition and self-regulation with structural equation. *International Online Journal of Educational Sciences*, 6(3), 603-611.
- Aydın, S., Keskin, M. Ö. & Yel, M. (2014). Turkish adaptation of the self-regulation questionnaire: A study on validity and reliability. *Turkish Journal of Education*, 3(1), 24-33.

Aydın, S. & Atalay D. T. (2015). Öz-düzenlemeli öğrenme. Ankara: Pegem A Yayıncılık.

- Brown, J. M., Miller, W. R., & Lawendowski, L. A. (1999). *The self-regulation questionnaire*. In L. VandeCreek & T. L. Jackson (Eds.), Innovations in Clinical Practice: A Source Book, Vol. 17. Sarasota, FL: Professional Resource Press.
- Büyüköztürk, Ş., Çakmak, E. K., Akgün, Ö. E., Karadeniz, Ş. & Demirel, F. (2015). *Scientific research methods*. Ankara: Pegem Akademi.
- Calvin, İ. H. & Ojeman, G. A. (2009) Neil'in Beyniyle Konuşmalar, Düşünce ve Dilin Sinirsel Doğası. İstanbul: Metis Bilim Yayınları.



- Canca, D. (2005). Research of the relationship between university students' cognitive and metacognitive selfregulation strategies and their mathematics achievement according to gender. Unpublished master thesis, Yıldız Teknik University.
- Creswell, J. W. (2014). Research design qualitative, quantitative, and mixed methods approaches. Ankara: Eğiten Kitap.
- Çiftçi, S. (2012). The effects of metacognitive mapping tool on the self-regulation skills of students, metacognitive awareness and achievement of these students in a web based education. Gazi University, Unpublished doctoral dissertation.
- Dilber, N. Ç. (2014). The effect of self regulated strategy development model on secondary school students' argumentative texts. Unpublished doctoral dissertation, Ankara University, Ankara.
- Eroğlu, Z. D. (2013). The relationship between the reading habits and correct writing skills of teacher candidates. *Turkish Studies*, 8(9): 1441-1453.
- Gouin, R. D. (2012). The relationship between learning self-regulation skills and improved performance in reading and language arts for middle school students. Unpublished doctoral dissertation. Walden University, United States.
- Graham, S., Harris, K. R. & Mason, L. (2005). Improving the writing performance, knowledge, and self-efficacy of struggling young writers: The effects of self-regulated strategy development. *Contemporary Educational Psychology*, 30(2), 207-241.
- Kalaycı, Ş. (2009). SPSS applied multi-variable statistics techniques. Ankara: Asil Yayınevi.
- Kaplan, A., Lichtinger, E. & Margulis, M. (2011). The situated dynamics of purposes of engagement and self-
- regulation strategies: A mixed-methods case study of writing. *Teachers College Record*, 113(2), 284-324.
- Karasar, N. (2005). Research method. Ankara: Nobel Yayın Dağıtım.
- McCoy, J. (2013). *Self-regulation within a writing workshop*. Unpublished master dissertation. Western Illinois University, Macomb, United States.
- Medina, J. (2010). Beynin Kuralları. İstanbul: Kuzey Yayınları.
- Nami, Y., Enayati, T. & Ashouri, M. (2012). The relationship between self-regulation approaches and learning
- approaches in English writing tasks on English foreign language students. *Procedia Social and Behavioral Sciences*, 47, 614-618.
- Oruç, A. (2012). The effect of self regulated learning upon reading comprehension, attitude and metacognitive *thinking*. Unpublished master dissertation. Bülent Ecevit University, Zonguldak.
- Özbay, M. & Daşöz, T. (2016). Self-regulated learning and writing instruction. A. Ü. Türkiyat Araştırmaları Enstitüsü Dergisi, 56, 1441-1458.
- Pintrich, P. R. (2004). A conceptual framework for assessing motivation and self-regulated learning in college students. *Educational Psychology Review*, 16(4), 385-407.
- Schunk, D. H. & Zimmerman, B. J. (2007). Influencing children's self-efficacy and self-regulation of reading and writing through modeling. *Reading & Writing Quarterly: Overcoming Learning Difficulties*, 23(1), 7-25.
- Sieben, N. (2013). Writing hope, self-regulation, & self-efficacy. Unpublished doctoral dissertation. Hofstra University, New York.
- Sperger, D. R. (2010). An exploratory pretest and posttest investigation of the effects of the effects of the selfregulated strategy development approach to writing instruction on middle school boys' writing achievement. Unpublished doctoral dissertation, University of Hartford, Hartford.
- Steffens, K. (2006). Self-Regulated learning in technology-enhanced learning enviroments: Lessons of a european peer review. *European Journal of Education*, 41(3/4), 353-379.
- Stillings, N., Weisler, S., Chase, C. H., Feinstein, M. H., Garfield L. J. & Rissland, E. L. (1994). *Cognitive Science An Introduction*, London: Bradford Book The MIT Press Cambridge.
- Taşdemir, M. (2003). Planning and evaluation in education. Ankara: Ocak Yayınları.
- Tracy, B., Reid, R. & Graham, S. (2009). Teaching young students strategies for planning and drafting stories: The impact of self-regulated strategy development. *The Journal of Educational Research*, 102(5), 323-331.
- Uygun, M. (2012). The effects of self regulated strategy development on writing expression, self regulation of writing, retention and writing attitude. Unpublished doctoral dissertation. Hacettepe University, Ankara.
- Vandevelde, S., Van Keer H. & De Wever B. (2011). Exploring the impact of student tutoring on at-risk fifth and sixth graders' self-regulated learning. *Learning and Individual Differences*, 21(4), 419-425.
- Wright, D. B. (2006). Discovering statistics using SPSS. London: SAGE Publication.

Yıldırım, A. & Şimşek, H. (2013). Qualitative research methods in social sciences. Ankara: Seçkin Yayıncılık.

- Zimmerman, B. J. (2000). Attaining self regulation: A social cognitive perspective. In P. Boekaerts, R. Pintrich and M. Zeidner (eds.). *Handbook of self-regulation*. London: Academic Press.
- Zimmerman, B. J. (2002). Becoming a self-regulated learner: An overview. Theory into Practice, 41(2), 64-70.



- Zimmerman, B. J. & Cleary, T. J. (2006). Adolescents' development of personal agency. In Pajares, F. & Urdan, T. (Eds.) Self-Efficacy Beliefs of Adolsecents (45-69). Greenwich: Information Age Publishing.
- Zimmerman, B. (2008). Investigating self-regulation and motivation: Historical background, methodological developments, and future prospects. *American Educational Research Journal*, 45(1), 166-183.
- Zumbrunn, S. (2010). Nurturing students' writing knowledge, self-regulation, attitudes, and self-efficacy: the effects of self-regulated strategy development. Unpublished doctoral dissertation. University of Nebraska, Lincoln.
- Zumbrunn, S. & Bruning, R. (2013). Improving the writing and knowledge of emergent writers: The effects of self-regulated strategy development. *Reading and Writing*, 26(1), 91-110.

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