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Examining High School Students' Writing Self-efficacy Perceptions

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ABSTRACT

The aim of this study was to investigate whether high school students' writing self-efficacy perceptions differ based on their gender, grade level, type of high school and the number of books they read annually. A total of 585 students (Females = 270; and Males = 315) studying in the ninth and tenth grade classes from high schools of different type participated in the study. The results showed that high school students' self-efficacy perceptions differed based on their gender, grade level, school type and the number of book they read annually. This difference was observed in the writing stages of planning, drafting, revision and modification. Consequently, it was concluded that reading books positively affected individuals' writing self-efficacy.

Key words: Writing Skills, Self-efficacy, Turkish Language Education

INTRODUCTION

Writing, like speaking, is a way of communicating with others and getting to know ourselves (Gündüz & Şimşek, 2011). It is the expression of feelings, ideas, desires and events in our minds through various symbols based on certain rules. Writing is a skill that not only involves various processes, abilities, techniques, procedures and dimensions, but also includes cognitive and physical processes and develops late (Güneş, 2013).

Writing is a complicated and challenging task that raises motivational difficulties even for skilful writers. Writers should start with a defined task, determine a goal, produce ideas, organise them and find appropriate expressions to clarify their meanings, and consider the needs of readers who cannot provide feedback (MacArthur, Philippakos & Graham, 2016). Writing instruction that presumably starts with the question of how to write has been addressed as a skill with educational studies in recent decades. Various models have been proposed with regard to the development of this skill that involve cognitive and physical processes. The publication of the writing models (i.e. models of Flower & Hayes, 1981; Hayes, 1996, 2012) considerably affected writing instruction (van Waes, van Weijen & Leijten, 2013). According to Hayes, there are three main cognitive processes in play within the writing process. These are the writer's long-term memory, the cognitive processes related to writing, and the task environment (Prat-Sala & Redford, 2012). Moreover, Flower and Hayes (1980) state that the cognitive processes of writing include planning, drafting and revision-modification.

Writing is elaborated in the scope of psychology in addition to the models on cognitive processes. In this respect, what come to the forefront are the studies that examine the writing skill in terms of Bandura's Social Learning Theory (1977) and the concept of self-efficacy. In the socio-cultural perspective, individuals are seen as having a proactive and self-regulatory power instead of as a biological entity that can be controlled by reactive and environmental powers. In fact, according to Bandura, it helps people determine how they behave with their self-efficacy beliefs about their abilities, what they do with their knowledge and skills (Pajares, 2003).

Writing Self Efficacy

Bandura (1986, p. 94) defines self-efficacy perceptions as "*individuals' judgements of their abilities in organising and conducting actions necessary to achieve a certain level of performance in an area"*. Self-efficacy perceptions affect thought patterns, actions and emotional stimulation. The higher individuals' stimulated self-efficacy level is, the higher their performance accomplishments are and the lower their emotional stimulation is (Bandura, 1982). Self-efficacy perceptions that influence cognitive, motivational, affective and choice-related processes contribute to academic development at three levels. Accordingly, these perceptions affect students' beliefs regarding their effectiveness in regulating their own learning and managing academic activities, as well as their desires, motivational levels and academic achievement (Bandura, 1993).

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Self-efficacy is assumed to have an influence on task selection, effort, persistence and success (Bandura, 1986; Schunk, 1995). Compared to students who doubt their learning abilities, those who have high self-efficacy for learning and task accomplishment participate in activities more easily, work harder, persist longer when they encounter difficulties and reach to a higher level (Schunk, 2003).

Self-efficacy perceptions form the basis for motivation, well-being and personal success (Pajares, Johnson & Usher, 2007). Individuals create self-efficacy beliefs by interpreting data from four different sources. The most influential source is the interpreted result of individuals' performance or mastery experience. The second source is constituted by vicarious experience gained as others are observed when they accomplish a task. As the third source, individuals develop their self-efficacy perceptions as a result of the verbal messages they get from others and verbal persuasion. Positive persuasion may work for encouragement and reinforcement, while negative persuasion may lead to demolishing or weakening one's own beliefs. As for the last source, physiological states like anxiety and stress also provide information regarding one's self-efficacy beliefs (Pajares, 2003).

In the context of writing, self-efficacy has been shown to be consistent with academic performance, particularly writing achievement. Conceptually, self-efficacy refers to specific abilities, and writing requires self-regulation apart from many skills, strategies and knowledge (MacArthur at al., 2016). Writing self-efficacy is defined as one's belief in his/her writing ability. Bandura's findings show that higher writing self-efficacy would contribute to better writing performance, independent from students' actual writing ability (Martinez, Kock & Cass, 2011). Findings of a number of studies including Pajares & Johnson, 1994, 1996; Pajares, Miller, &Johnson, 1999; Pajares & Valiante 1997, 1999, 2001; Rankin, Brunning & Timme, 1994; Schunk & Swartz, 1993; Shell, Murphy & Bruning, 1995; Wachholz & Etheridge, 1996 and Zimmerman & Bandura, 1994 indicate that self-efficacy and writing performance are strongly related to each other (Pajares, Johnson & Usher, 2007).

Studies on writing self-efficacy perceptions in Turkey focused on learners of Turkish as a foreign language (Büyükikiz, Uyar & Balcı, 2013;Altunkaya & Ateş, 2017; Erdil, 2017), elementary school students (Bulut, 2017), middle school students (Arslan, 2018) and teacher candidates (Batar & Aydın, 2014; Altunkaya & Topuzkanamış 2018). However, in the present study, students' writing self-efficacy perceptions were examined in high schools of different type. The primary research question of the study was formulated as follows: "What is the level of high school students' writing self-efficacy perceptions?" Accordingly, the following research questions were addressed:

1. How do high school students' levels of writing self-efficacy perceptions differ based on
   a) their gender?
   b) their high school type?
   c) their grade level?
   d) the number of books they read annually?
2. How do high school students' levels of writing self-efficacy perceptions in the stages of planning (P), drafting (D) and revision and modification (RM) differ based on
   a) their gender?
   b) their high school type?
   c) their grade level?
   d) the number of books they read annually?

METHOD

Research Design

This study was conducted in accordance with the situation determination design within quantitative research methodology.

Participants

The population consisted of ninth and tenth grade students studying in different types of high schools in the Buca district of Izmir province in Turkey. In this regard, the sample contained 585 (270 female and 315 male) ninth and tenth graders studying in Buca Fatma Saygın Anatolian High School, Işılay Saygın Fine Arts High School, Buca İnci-Özer Tırnaklı Science High School, Buca Necla-Tevfik Karadavut Vocational and Technical Anatolian High School, Hoca Ahmet Yesevi Anatolian Religious High School and Buca Mehmet Akif Ersoy Anatolian Teacher Training High School. Ninth and tenth graders were selected because the writing curricula of these grade levels include planning, drafting, post-writing revision and modification.

Data Collection Tools

Writing self-efficacy perception scale (WSEPS). The "Writing Self-Efficacy Perception Scale" [59] was used to gather data in the present study. WSEPS consists of three factors that are "Planning", "Drafting" and "Revision and Modification". The variances explained by these factors are 7.2% (12 items; Planning), 33.6% (33 items; Drafting), 3.9% (9 items; Revision and Modification). The factor loading values range between.42-.68 in planning.,37-.67 in drafting and.60-.81 in revision and modification. The Cronbach's Alpha reliability coefficients of the factors are reported to be.88.,96 and.89, respectively. The reliability coefficient for the whole scale is.96 (Aydın, İnnalı, Batar, Çakır, 2013).

A confirmatory factor analysis was conducted with 246 students to determine the usability of the scale in high school students. The results of the second-level confirmatory factor analysis revealed standardized factor loading values ranging between.41-.69 in planning.,46-.65 in drafting and.35-.55 in revision and modification. None of the items had a factor loading lower than.30, and all t values were significant. The goodness-of-fit index values were found to be $\chi 2/sd$ (2489.20/1374)=1.81. The ratio $\chi 2/sd$ being ≤ 3 shows perfect fit (Klein, 2005). RMSEA was found to be 0.058. RMSEA being ≤ 0.08 meets the criteria for good fit (Sümer, 2000). SRMR was found to be 0.069, which also

shows good fit when standardized RMR value is ≤0.08 [14]. NNFI, CFI, IFI and GFI were found to be 0.93, 0.93, 0.93 and 0.73, respectively. These indices being over 0.90 refer to good fit (Tabachnick, Fidell, 2001). For GFI, values over 0.85 indicate acceptable fit (Yılmaz, Çelik, 2009). The only values below the acceptable fit were GFI values. All other indices showed good fit and, $\chi 2$/sd ratio showed perfect fit.

The missing values, outliers and the assumption regarding the suitability of the sample size were examined before starting the analyses. An average value was assigned to the missing values in the data set, whereas there were no outliers. The normality of the distribution of scores were examined to select the technique that would be used to determine the difference between the students' scores from the WSEPS, and the results are presented in Table 1.

As is seen in Table 1, the students' scores showed normal distribution, and accordingly, parametric tests were used to determine the difference. The normality of the distribution of scores were also examined to select the technique that would be used to determine the difference between the students' scores from the sub-scales of the WSEPS (i.e. planning, drafting, and revision and modification), and the results are presented in Table 2.

As can be seen in Table 2, the high school students' scores in the drafting sub-scale showed normal distribution, while those in the planning, and revision and modification sub-scales did not show normal distribution. Based on these findings, parametric tests were used for the drafting sub-scale, but non-parametric tests were employed for the planning, and revision and modification sub-scales.

RESULT

The results of the t-test are presented in Table 3, regarding the statistical difference between the high school students' scores based on gender.

Table 1. Results of the distribution normality test

Wseps total score	Kolmogorov-smirnov		
	KS	***SD***	***p***
	0.026	585	0.200

$N = 585$; $p > 0.05$

Table 2. Results of the distribution normality test for the sub-scales

	Kolmogorov-smirnov		
	KS	***SD***	***p***
Planning	0.050	585	0.001
Drafting	0.035	585	0.086
Revision and modification	0.071	585	0.000

A significant difference (p<.05) was found in the students' scores from the WSEPS based on gender. The mean scores of the female students were higher than those of the male students. Therefore, it can be argued that girls have higher self-efficacy than boys, at least for high school students in the Turkish context.

The results of ANOVA are presented in Table 4, regarding the statistical difference between the high school students' scores based on their type of high school.

The students' arithmetic means of their self-efficacy scores based on school type can be ranked as follows: Anadolu High School>Science High School>Religious High School>Fine Arts High School>Vocational High School. Consequently, a significant difference was found between the students based on their school type, F(4.580)=3.434.,009<.05. The results of the Tukey post-hoc test showed that the self-efficacy perceptions of the Anatolian high school students ($\bar{X}$=3.6693) were significantly more positive than those of the vocational high school students ($\bar{X}$=3.4448).

The results of the t-test are presented in Table 5, regarding the statistical difference between the high school students' scores based on grade level.

A significant difference (p<.05) was found in the students' scores from the WSEPS based on grade level. Accordingly, it can be argued that ninth graders have higher self-efficacy than tenth graders.

The results of ANOVA for the statistical difference between the high school students' scores based on the number of book they read annually are presented in Table 6.

The students' arithmetic means of their self-efficacy scores based on the number of books they read annually can be ranked as follows: 7 or more books>4-6 books>3-1 books>No books. The analysis revealed a significant difference between the participants based on the number of books they read annually, F(3.153.721)= 14.287 p<.05. According to the Tukey test, the significant differences were between the participants who did not read any books and those who read 4-6 books, and between the participants who read 4-6 books and those who read 7 or more books.

The results of the Mann Whitney U test are presented in Table 7, and the statistical difference between the high school students' scores in the planning sub-scale based on their gender and grade level is shown.

As can be seen in Table 7, a significant difference was found between the female and male students' scores in the planning sub-scale, U=31425.5; p<05. The female students can thus be said to have more positive perceptions towards the planning aspect of writing compared to their male peers. Another significant difference was also revealed between the ninth and tenth graders' scores in the planning sub-scale, U=37144.5; p<05, and this difference was in favour of the ninth graders who had higher scores than the tenth graders.

Table 3. Difference in self-efficacy perceptions based on gender

	Gender	*N*	*M*	*SD*	*t*	*sd*	*p*
WSEPS	Female	270	3.69	0.468	6.551	583	000
	Male	315	3.41	0.549	6.630	582.991	000

The results of the Kruskal Wallis test are presented in Table 8, and the statistical difference between the high school students' scores in the planning sub-scale based on their school type and the number of books they read annually is shown.

With the results presented in Table 8, it was determined whether the students' scores in the planning sub-scale significantly different based on school type, $X^2_{(4)}=6.670, p>.05$. There was no significant difference between the students' scores in the context of this variable. However, their scores in the planning sub-scale significantly different based on the number of books they read annually, $X^2_{(3)}=38.068, p>.05$. In order to find out the source of this difference, binary Mann-Whitney U tests were performed, and significant difference were found between the students who did not read at all and those who read 4-6 books and 7 or more books, between the students who read 1-3 books and those who read 4-6 books and 7 or more books, and lastly, between the students who read 4-6 books and those who read 7 or more books ($p<.05$).

The students who read 7 or more books annually had more positive self-efficacy perceptions regarding the planning aspect of writing.

The results of the t-test are presented in Table 9, and the statistical difference between the high school students' normally-distributed scores in the drafting sub-scale based on their gender and grade level is shown.

The students' scores in the drafting sub-scale significantly different based on their gender, ($p<.05$). Apparently, the female students had more positive self-efficacy perceptions regarding the drafting stage of writing compared to their male peers. As for the grade level, there was a significant difference between the students' scores in the drafting sub-scale, ($p<.05$). The ninth graders' mean score in the drafting sub-scale was significantly higher than that of the tenth graders, and thus the ninth graders had more positive self-efficacy perceptions in this respect. The results for the difference between the high school students' scores in the drafting sub-scale based on their school type and the number of books they read annually are presented in Table 10.

Table 4. Difference in self-efficacy perceptions based on school type

Type of high school	*N*	*M*	*SD*
Science high school	148	3.58	0.503
Anatolian high school	113	3.66	0.507
Vocational high school	134	3.44	0.554
Religious vocational high school	86	3.50	0.553
Fine arts high school	104	3.48	0.522
Total	585	3.54	0.531

The students' mean scores in the drafting sub-scale of the writing self-efficacy perception scale can be ranked based on school type as follows: Anadolu High School>-Science High School>Religious High School>Fine Arts High School>Vocational High School. The students' self-efficacy perceptions regarding the drafting sub-scale significantly differed based on their school type, $F(4.580)=3,434$, $p<.05$. Accordingly, the students studying in a science high school and in an Anatolian high school had more positive self-efficacy perceptions related to drafting a text than those studying in a vocational high school did. As for the number of books the students read annually, their mean scores in the drafting sub-scale can be ranked as follows: 7 or more books>4-6 books>1-3 books>No books. The students' self-efficacy perceptions regarding the drafting sub-scale significantly differed based on the number of books they read annually, $F(3.581)=14,287$ $p<.05$. The students who read 4-6 books had more positive self-efficacy perceptions than those who did not read any book, and similarly, the students who read 7 or more books had more positive self-efficacy perceptions than those who read 1-3 books and who did not read any books.

The results of the Mann Whitney U test are presented in Table 11, and the statistical difference between the high school students' scores in the revision and modification sub-scale based on their gender and grade level is shown.

When it was examined whether the students' scores in the revision and modification sub-scale significantly differed based on gender, the results revealed a significant difference at the level of $p<.05$. The female students had more positive self-efficacy perceptions in the revision and modification aspect of the writing process compared to the male students. Yet, regarding the grade levels, there was no significant difference in this sub-scale. Although the ninth graders had a higher mean score in the revision and modification sub-scale than the tenth graders did, this difference was not statistically significant.

As is seen in Table 12, there were statistically significant differences between the students' scores in the revision and modification sub-scale based on school type and the number of books they read annually ($X^2_{(4)}=18.555$, $p<.05$; $X^2_{(3)}=22.085$, $p<.05$, respectively). In this regard, it can be stated that school time and the number of books read might be related to high school students' level of self-efficacy perceptions in the revision and modification aspect of the writing process. In order to reveal the source of the differences, the binary Mann-Whitney U test was performed. The results of the analyses revealed a significant difference between the science high school and religious vocational high school students, and also between the Anatolian high school students and vocational, religious vocational and fine arts high school students. It can thus be concluded that the science and Anatolian high school students had more positive

Table 5. Difference in self-efficacy perceptions based on grade level

	Class	N	*M*	*SD*	*t*	*sd*	*p*
WSEPS	Ninth grade	300	3.59	0.540	2.457	583	0.014
	Tenth grade	285	3.48	0.517	2.460	582.973	0.014

self-efficacy perceptions in the revision and modification aspect of writing. As for the number of books read, there were significant differences between the students who did not read any books and those who read varying number of books, and between the students who read 1-3 books and those who read 4-6 books and 7 or more books. Consequently, it can be argued that the students who had a reading habit had more positive self-efficacy perceptions in the revision and modification aspect of writing than those who did not read at all, and this perception got more positive as the number of books read increased.

DISCUSSION

In the present study, high school students' writing self-efficacy perceptions were examined, and the findings showed that the students' perceptions significantly differed based on their gender, grade level, type of high school and the number of books they read annually. When the students' scores were analysed with regard to the sub-scales of the WSEPS, which are planning, drafting and revision and modification, significant differences were revealed based on gender, the type of high school and the number of books read. However, no significant difference was found in the revision and modification sub-scale in terms of grade level.

The findings of many studies demonstrated the relationship between writing performance and writing self-efficacy perceptions. In studies conducted in different populations, self-efficacy perceptions were found to affect writing performance (see Altunkaya & Ateş, 2017; Bulut, 2017; Hethog &Teo, 2013; Nicolaidou, 2012; Xu & Baek., 2011). Research on the self-efficacy perceptions of students from elementary school to higher education level revealed different results related to the gender variables. In the present study, the high school students' writing self-efficacy perceptions differed based on gender, and this difference was valid for different sub-dimensions of writing. The mean score of the female students in the writing self-efficacy perception scale ($\bar{X}$=3.6917) was higher than that of the male students ($\bar{X}$=3.4127). The difference in favour of the female students was in the sub-scales of planning, drafting and revision and modification. Pajares (2003) states that girls typically get higher scores in writing, and are rated as better writers by their teachers. The self-efficacy perceptions of girls who have more positive perceptions than boys decrease after elementary school, but stay at a constant level in high school (Pajares et al., 2007). In a study on middle school students' writing anxiety and academic self-efficacy, Arslan (2018) found that girls had higher academic self-efficacy than boys. In another study on university students, Batar and Aydın (2014) reported that female students had higher self-efficacy compared

Table 6. Difference in self-efficacy perceptions based on the number of books read annually

Number of books read	N	M	SD
No books	25	3.16	0.530
1-3	180	3.40	0.533
4-6	151	3.56	0.485
7 or more	229	3.67	0.515
Total	585	3.54	0.531

Table 7. Difference in the planning aspect of writing self-efficacy perceptions based on gender and grade level

Gender	N	Rank total	Rank mean	*U*	*Z*	*p*
Female	270	90209.50	334.11	31425.5	–5.451	000
Male	315	81195.50	257.76			
Grade						
Ninth Grade	300	93505.50	311.69	37144.5	–2.745	006
Tenth Grade	285	77899.50	273.33			

Table 8. Difference in the planning aspect of writing self-efficacy perceptions based on school type and the number of books read

School type	*N*	*M*	*SD*	X^2	*p*
Science high school	148	285.19	4	6.670	0.154
Anatolian high school	113	311.59			
Vocational high school	134	268.49			
Religious vocational high school	86	319.78			
Fine arts high school	104	293.35			
Number of books read					
No books	25	205.84	3	38.068	000
1-3	180	243.81			
4-6	151	298.40			
7 or more	229	337.62			

Table 9. Difference in the drafting aspect of writing self-efficacy perceptions based on gender and grade level

Gender	***N***	***M***	***SD***	***t***	***SD***	***p***
Female	270	3.65	0.518	4.750	583	000
Male	315	3.44	0.580	4.791	582.034	000
Grade						
Ninth Grade	300	3.59	0.556	2.499	583	0.013
Tenth Grade	285	3.48	0.565	2.498	580.303	0.013

Table 10. Difference in the drafting aspect of writing self-efficacy perceptions based on school type and the number of books read

Type of high school	***N***	***M***	***SD***
Science high school	148	3.62	0.503
Anatolian high school	113	3.66	0.507
Vocational high school	134	3.43	0.554
Religious vocational high school	86	3.49	0.553
Fine arts high school	104	3.46	0.522
Number of Books Read			
No books	25	3.18	0.544
1-3	180	3.41	0.581
4-6	151	3.54	0.498
7 or more	229	3.67	0.554

to their male peers. In a similar context, Aydın and Duğan (2018) determined that female university students had higher efficacy in applying grammar rules than male students did. Altunkaya and Ateş (2017) focused on the relationship between the writing self-efficacy and writing performance of learners of Turkish as a foreign language, and indicated that female learners had higher scores. Although various studies in the literature Bağcı (2007), Özdemir (2008), Yılmaz, Yiğit, Kaşarcı (2012), Baş & Şahin (2012) reported that writing self-efficacy perceptions are more positive in women, some studies Ekici (2008), Ülper & Bağcı (2012), Eggleston (2017) could not reveal a difference in self-efficacy based on gender.

One of the variables examined in this study in relation to writing self-efficacy was grade levels. The results showed that ninth graders ($\bar{X}$=3.5939) had higher writing self-efficacy perceptions than tenth graders ($\bar{X}$=3.4863). In terms of the sub-scales of the WSEPS, the self-efficacy perceptions of the ninth graders were significantly higher in the planning and drafting sub-scales than those of the tenth graders, but the difference was not significant although the mean of the ninth graders was higher. Based on these results, it can be concluded that self-efficacy perceptions in high school students decreased as the grade level increased. Pajares and Valiante (1999) who investigated writing self-efficacy perceptions in middle school students found that sixth graders had higher self-efficacy than their seventh and eighth grade peers. Similarly, Arslan (2018) reported that the self-efficacy perceptions of fifth graders were higher than those of sixth, seventh and eighth graders. According to Pajares, Johnson and Usher (2007), elementary school students have higher self-efficacy than middle and high school students. Apart from the students that support the finding that self-efficacy differ based on grade level, Prat-Sala and Redford (2012) focused on undergraduate students and found that the relationship between self-efficacy and writing was stronger in second-year students than in first-year students. Similarly, Batar and Aydın (2014) reported that the highest self-efficacy perceptions were observed in second-year university students, and the lowest in first-year students. Yet, there are also studies that did not report any significant difference in self-efficacy perceptions based on grade level (Baş & Şahin, 2012; İşeri & Ünal, 2012; Korkut & Akkoyunlu, 2008; Seçkin & Başbay, 2013).

When the students' self-efficacy perceptions were examined in terms of their type of high school, it was found that the Anatolian high school students had high self-efficacy perceptions that the vocational high school students. As for the sub-dimensions of the writing process, the school type led to a difference in the stages of drafting, and revision and modification. In this regard, the Anatolian high school students had higher self-efficacy in drafting, and revision and modification compared to the students of other types of high schools.

The students' attitudes towards and habit of reading were also influential on their writing skills. Although most high school students exhibit high levels of attitudes towards reading (Akkaya, Özdemir, 2013), they are reported to lack a desired level of reading habits in another study (Can & Karadeniz 2017). The findings of the present study showed that the number of books the students read annually was directly proportionate to their writing self-efficacy perceptions. This was also valid for the sub-dimensions of writing. Melanlıoğlu and Atalay (2016) indicated that learners of Turkish as a foreign language who read books, newspapers and magazines in Turkish have high self-efficacy. It can thus be argued that reading books is influential on students' self-efficacy perceptions.

High school years cover a period that coincides with adolescence. In this period, students go through different changes physically and mentally. It is often regarded as a chaotic process as well. Individuals' beliefs about themselves during this period directly affect their future lives. Accordingly, in the context of wiring, planning a task, maintaining it, and revising and modifying it are of great importance. Therefore, students' writing self-efficacy perceptions being low or high can be explained in the framework of causality in further studies, and provide insights to parents and educators to better understand this construct. Students' planning how

Table 11. Difference in the revision and modification aspect of writing self-efficacy perceptions based on gender and grade level

Gender	*N*	Rank total	Rank mean	*U*	*Z*	*p*
Female	270	94259.50	349.11	27375.5	–7.440	000
Male	315	77145.50	244.91			
Grade						
Ninth Grade	300	89303.50	297.68	41346.5	– 0.687	0.492
Tenth Grade	285	82101.50	288.08			

Table 12. Difference in the revision and modification aspect of writing self-efficacy perceptions based on school type and the number of books read

School type	*N*	*M*	*SD*	X^2	*p*
Science high school	148	302.30	4	18.555	0.001
Anatolian high school	113	344.31			
Vocational high school	134	272.37			
Religious vocational high school	86	250.34			
Fine arts high school	104	85.86			
Number of books read					
No books	25	186.28	3	22.085	0.000
1-3	180	262.38			
4-6	151	315.61			
7 or more	229	313.81			

to execute a task, making an effort for it and self-regulation (Güneş, 2013) are necessary for them to effectively manage both their daily life and work. One of the most important arguments based on Bandura's social cognitive learning theory (Bandura, 1982, 1986, 1993) is that self-efficacy perceptions are positively related to the level of performance. In this respect, activities towards high school students' self-efficacy perceptions should be carried out by considering their characteristics of the adolescence period, and they should be taught strategies for planning so that their self-efficacy perceptions can be improved.

CONCLUSION

As a result, the high school students' writing self-efficacy beliefs differed based on their gender, grade level, type of school and reading habit. In addition, there was a similar difference in the students' writing self-efficacy beliefs in the stages of their writing process (i.e. planning, drafting, reviewing and revising) based on the same variables.

The effect of writing efficacy on writing performance has been well-documented in the literature. Since gender is a variable that affects writing self-efficacy, it should be taken into account in studies that focus on writing. Gender-specific studies can be conducted to enhance students' writing self-efficacy. The positive influence of the reading habit, that is students' reading regularly and for longer periods, was also observed in the present study. Therefore, it can be argued that students' writing self-efficacy can be improving by increasing their amount of reading. One of the variables that lead to a difference in writing self-efficacy is the type of high school students study in. In Turkey, students are placed into high schools based on their score in a placement exam after middle school. Those who get the highest scores in this exam prefer science high schools and Anatolian high schools, respectively. It can thus be stated that students who study in these high schools are generally more successfully than those from other types of high schools. In the current study, in a similar vein, the students of the Anatolian and Science High Schools had higher levels of writing self-efficacy, which should also be considered in the research studies on writing. In the study, writing self-efficacy was observed to decrease as the grade level increased, which was also reported in other studies in the literature. In fact, students' writing self-efficacy is expected to get better as they progress in their high school education. However, the case observed is the opposite. This should be examined in a way to cover the sub-dimensions that affect writing self-efficacy in future studies. The reasons behind the decrease in writing self-efficacy in higher grades should be investigated, and solutions should be offered.

REFERENCES

Akkaya, N. & Özdemir, S. (2013). Ortaöğretim Öğrencilerinin Okumaya Yönelik Tutumlarının İncelenmesi (İzmir – Buca Örneği). *Bartın Üniversitesi Eğitim Fakültesi Dergisi, 2*(1), *75-96*.

Altunkaya, H. & Ateş, A. (2017). Yabancı Dil Olarak Türkçe Öğrenenlerin Yazma Özyeterlilikleri ile Yazılı Anlatım Becerileri Arasındaki İlişki. *Erzincan Üniversitesi Eğitim Fakültesi Dergisi, 19 (3)*, 86-103.

Altunkaya, H. & Topuzkanamış, E. (2018). The Effect of Using Facebook in Writing education on Writing Achievement,

Attitude, Anxiety and Self-efficacy Perception. *Universal Journal of Educational Research, 6*(10), 2133-2142.

Arslan, A. (2018). Ortaokul öğrencilerinin yazma kaygıları ve akademik öz-yeterlik inançlarının çeşitli değişkenler açısından incelenmesi. *Abant İzzet Baysal Üniversitesi Eğitim Fakültesi Dergisi, 18*(3), 1286-1312.

Aydın, B.O. & Duğan, Ö. (2018). Halkla İlişkiler Lisans Öğrencilerinin Yazma Öz Yeterlilik Algılarının Belirlenmesi Üzerine Bir Çalışma. *International Journal of Saocial and Education Research, 4*(1), 150-164.

Aydın, İ.S., İnnalı, H.Ö., Batar, M. & Çakır, H. (2013). Öğretmen Adaylarının Yazılı Anlatım Öz Yeterliklerine Ilişkin Ölçek Geliştirme Çalışması. *Turkish Studies, 8*(8), 139-160.

Bağcı, H. (2007). *Türkçe öğretmeni adaylarının yazılı anlatıma ve yazılı anlatım derslerine yönelik tutumlarının değerlendirilmesi.* Doktora Tezi, Gazi Üniversitesi Eğitim Bilimleri Enstitüsü, Ankara.

Bandura, A. (1982). Self –Efficacy Mechanism in Human Agency. *American Psychologist, 37,* 122-147.

Bandura, A. (1986). *Social Foundations of Thought and Action: A Social Cognitive Theory.* Englewood Cliffs, NJ: Prentice-Hall.

Bandura, A. (1993). Perceived Self – Efficacy in Cognitive Development and Functioning. *Educational Psychologist, 28*(2), 117-148.

Batar, M. & Aydın, İ.S. (2014). Türkçe Öğretmeni Adaylarının Yazılı Anlatım Öz Yeterlilik İnançlarının Değerlendirilmesi. *International Journal of Language Academy, 2*(4), 579-598.

Baş, G. & Şahin, C. (2012). İlköğretim 6. 7. ve 8. sınıf öğrencilerinin okuma tutumları ve yazma eğilimleri ile Türkçe dersindeki akademik başarıları arasındaki ilişki. *Turkish Studies - International Periodical for the Languages, Literature and History of Turkish or Turkic, 7(*3), 555-572.

Bulut, P. (2017). The Effect of primary School Students' Writing attitudes and Writing Self-Efficacy Beliefs on Their Summary Writing Achievement. iejee, *10*(2), 281-285.

Büyükikiz, K.K., Uyar, Y. & Balcı, A. (2013). A Writing Self-Efficacy Scale for Non-Native Students of Turkish Origin: A Validity and Reliability Study. *International Online Journal of Educational Sciences, 5*(2), 302-313.

Can, R.& Karadeniz, A. (2017). Ortaöğretim Öğrencilerinin Okuma Alışkanlıkları Üzerine Bir Araştırma (Kırşehir İli Örneği). *The Journal of Academic Social Science, 5*(55), 75-91.

Çokluk, Ö., Şekercioğlu, G. & Büyüköztürk, Ş. (2010). *Sosyal bilimler için çok değişkenli istatistik: SPSS ve lisrel uygulamaları*, Ankara: PegemA.

Eggleston, B.*N. (2017). Relationship between Writing Self-Efficacy and Writing Fluency in a Performance Feedback Intervention.* Master's Thesis, Syracuse University.

Ekici, G. (2008). Sınıf Yönetimi Dersinin Öğretmen Adaylarının Öğretmen Öz-Yeterlik Algı Düzeyine Etkisi. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi, 35,* 98-110.

Erdil, M. (2017). Yabancı Öğrencilerin Türkçe Yazma Becerisine Karşı Öz Yeterlik Algıları. *TURKOPHONE*, 4(2), 87-101.

Flower, L. & Hayes, J. R. (1981). A Cognitive Process Theory of Writing. *College Composition and Communication, 32,* 365-387.

Graham, S. & Harris, K.R. (2009). Almost 30 Years of Writing Research: Making Sense of it all with The Wrath of Khan. *Learning Disabilities Research & Practice, 24,* 58–68.

Gündüz, O. & Şimşek, T. (2011). *Anlatma Teknikleri 2: Uygulamalı Yazma Eğitimi El Kitabı,* Ankara: Grafiker Yayınları.

Güneş, F. (2013). *Türkçe Öğretimi Yaklaşımlar ve Modeller,* Ankara: Pegem Akademi.

Hayes, J.R. & Flower, L.S. (1980). *"Identifying the Organization of Writing Processes," in Cognitive Processes in Writing: An Interdisciplinary Approach.* Gregg and Steinberg (Eds.), *Hillsdale* (pp. 3-30) N.J.: Lawrence Erlbaum Associates.

Hayes, J. R. (1996). A New Framework for Understanding Cognition and Affect in writing. In C. M. Levy & S. E. Ransdell (Eds.), *The Science of Writing: Theories, Methods, İndividual differences, and Applications* (pp.1-27). Mahwah: New Jersey: Lawrence Erlbaum Associates.

Hayes, J. R. (2012). Modeling and Remodeling Writing. *Written Communication, 29*(3), 369-388.

Hetthog, R. & Teo, A. (2013). Does writing self-efficacy correlate with and predict writing performance? *International Journal of Applied Linguisticsve English Literature, 2*(1), 157-167.

İşeri, K. & Ünal, E. (2012). Türkçe Öğretmen Adaylarının Yazma Kaygı Durumlarının Çeşitli Değişkenler Açısından Incelenmesi. *Mersin Üniversitesi Eğitim Fakültesi Dergisi, 8*(2), 67-76.

Kline, R.B. (2005). *Principles and Practice of Structural Equation Modelling*. New York: Guilford.

Korkut, E. & Akkoyunlu, B. (2008). Yabancı Dil Öğretmen Adaylarının Bilgi ve Bilgisayar Okuryazarlık Öz-Yeterlikleri. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi, 34*, 178- 188.

MacArthur, C.A., Philippakos, Z.A. & Graham, S. (2016). A Multicomponent Measure of Writing Motivation with Basic College Writers. *Learning Disability Quarterly, 39*(1) 31– 43.

Martinez, C.T., Kock, N. & Cass, J. (2011). Pain and Pleasure in Short Essay Writing: Factors Predicting University Students' Writing Anxiety and Writing Self Efficacy. *Journal of Adolescent & Adult Literacy, 54*, 351-360.

Melanlıoğlu, D. & Demir Atalay, T. (2016). Türkçe Öğrenen Yabancılar Örneğinde Yansıtıcı Günlük Kullanma ve Yazma Öz Yeterliliği Arasındaki İlişki. *Mustafa Kemal Üniversitesi Sosyal Bilimler Enstitüsü Dergisi, 13*(35), 56-76.

Nicolaidou, I. (2016). Can process portfolios affect students' writing self-efficacy? *International Journal of Educational Research, 56,* 10-22.

Özdemir, S.M. (2008). Sınıf Öğretmeni Adaylarının Öğretim Sürecine Ilişkin Öz-Yeterlik Inançlarının Çeşitli Değişkenler Açısından Incelenmesi. *Kuram ve Uygulamada Eğitim Yönetimi, 54*, 277-306.

Pajares, F., Johnson, M.J. & Usher, E.L. (2007). Sources of Writing Self-Efficacy Beliefs of Elementary, Middle, and High School Students. *Research in the Teaching of English, 42*(1), 104-120.

Pajares, F. (2003). Motıvatıon, And Achıevement in Wrıtıng: A Revıew of the Lıterature. *Reading & Writing Quarterly, 19,* 139-158.

Pajares, F. & Valiante, G. (2001). Gender Differences in Writing Motivation and Achievement of Middle School Students: A Function of Gender Orientation? *Contemporary Educational Psychology, 26*, 366-381.

Pajares, F., Miller, M.D. & Johnson, M.J. (1999). Gender Differences in Writing Self- Beliefs of Elementary School Students. *Journal of Educational Psychology, 91,* 50-61.

Pajares, F. & Valiante, G. (1999). Grade Level and Gender Differences in the Writing Self- Beliefs of Middle School Students. *Contemporary Educational Psychology, 24,* 390-405.

Pajares, F. & Valiante, G. (1997). Influence of Writing Self-Efficacy Beliefs on the Writing Performance of Upper Elementary Students. *Journal of Educational Research, 90,* 353-360.

Pajares, F. & Johnson, M. J. (1996). Self- efficacy beliefs in the writing of high school students: A path analysis. *Psychology in the Schools, 33*, 163-175.

Pajares, F. & Johnson, M.J. (1994). Confidence and Competence in Writing: The Role of Writing Self-Efficacy, Outcome Expectancy, and Apprehension. *Research in the Teaching of English, 28*, 313-331.

Prat-Sala, M. & Redford, P. (2012). Writing essays: does self-efficacy matter? The relationship between self-efficacy in reading and in writing and undergraduate students' performance in essay writing. *Educational Psychology, 32*(1), 9–20.

Rankin, J.L., Bruning, R.H. & Timme, V.L. (1994). The Development of Beliefs about Spelling and Their Relationship to Spelling Performance. *Appleid Cognitive Psychology, 8*, 213-232.

Seçkin, A. & Başbay, M. (2013). Beden Eğitimi ve Spor Öğretmeni Adaylarının Öğretmenlik Mesleğine İlişkin Öz-Yeterlik İnançlarının İncelenmesi. *Turkish Studies- International Periodical for the Languages, Literature and History of Turkish or Turkic, 8*(8), 253- 270.

Schunk, H.D. (2003). Self-Efficacy for Readıng and Wrıtıng: Influence of Modelıng, Goal Settıng, and Self-Evaluatıon. *Reading &Writing Quarterly, 19*(2), 159-172.

Schunk, D.H. (1995). *Self-efficacy and education and instruction. In J. E. Maddux (Ed.), Self-efficacy, adaptation, and adjustment: Theory, research, and application* (pp.281-303). New York: Plenum Press.

Schunk, D.H. & Swartz, C.W. (1993). Goals and Progress Feedback: Effects on Self- Efficacy and Writing Achievement. *Contemporary Educational Psychology, 18*,337-354.

Shell, D.E., Murphy, C.C. & Brunning, R.H. (1995). Self-Efficacy, Attributions, and Outcome Expectancy Mechanisms in Reading and Writing Achievement: Grade-Level and Achievement-Level Differences. *Journal of Educational Psychology, 87*, 386-398.

Sümer, N. (2000). Yapısal eşitlik modelleri: Temel kavramlar ve örnek uygulamalar. *Türk Psikoloji Yazıları, 3*(6), 49-74.

Tabachnick, B.G. & Fidell, L.S. (2001). *Using Multivariate Statistics (5th Ed.)*. USA: Pearson.

Ülper, H. & Bağcı, H. (2012). Türkçe Öğretmeni Adaylarının Öğretmenlik Mesleğine Dönük Öz Yeterlik Algıları. *Turkish Studies-International Periodical for the Languages, Literature and History of Turkish or Turkic, 7*(2), 1115-1131.

Van Waes, L., van Weijen, D. & Leijten, M. (2013). Learning to Write in an Online Writing Center: The effect of Learning Styles on the Writing Process. *Computers & Education*, 60-71.

Wachholz, P.B. & Etheridge, C.P. (1996). Writing Self-Efficacy Beliefs of High- And Low- Apprehensive Writers. *Journal of Developmental Education, 19*, 16-24.

Xu, Y.P. & Baek, H. (2011). A New Approach Toward Digital Storytelling: An Activity Focused on Writing Self Efficacy in a Virtual Learning Environment. *Journal of Educational Technology ve Society, 14*(4), 181-191.

Yılmaz, V. & Çelik, H.E. (2009). *LISREL ile Yapısal Eşitlik Modellemesi -1*. Ankara: PegemA.

Yılmaz, Y., Yiğit, R. & Kaşarcı, İ. (2012). İlköğretim Öğrencilerinin Özyeterlilik Düzeylerinin Akademik Başarı Ve Bazı Değişkenler Açısından İncelenmesi. *Mehmet Akif Ersoy Üniversitesi Eğitim Fakültesi Dergisi, 1*(23), 371-388.

Zimmerman, B. & Bandura, A. (1994). Impact of Self- Regulatory Influences on Writing Course Attainment. *American Education Research Journal, 31*, 845-862.