

Investigation of Students' Reading Anxiety with Regards to Some Variables

Hasan Huseyin Kilinc¹ & Emin Tamer Yenen²

¹ Assistant Professor, Department of Educational Sciences, Nevsehir Haci Bektas Veli University, Turkey

² PhD student, Department of Educational Programs and Teaching, Gazi Osman Paşa University, Turkey

Correspondence: Hasan Huseyin Kilinc, Assistant Professor, Department of Educational Sciences, Nevsehir Haci Bektas Veli University, Turkey

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Abstract

The aim of this study is to determine students' views on reading anxiety with regards to variables of gender and grade levels of the students and socio-economic level of the schools. To this end, Melanlıoğlu's (2014) "Reading Anxiety Scale", a 5 point likert scale consisting of 14 questions, was used. The scale consists of following sub-dimensions: planning of reading process, factors supporting reading, reading comprehension and analysis. The universe for the study consists of middle school students in a city center in Central Anatolia Region in Turkey. The results of the study indicate that students "sometimes" had anxiety in reading comprehension and analysis sub-dimensions while they "rarely" had anxiety in the sub-dimensions of planning reading process and factors supporting reading. There was no significant difference with regards to the gender variable in the sub-dimension of factors supporting reading whereas there was a significant difference in favor of males in the sub-dimensions of planning of reading process and reading comprehension and analysis. With regards to the socio-economic level of the school variable, it was observed that students from lower to middle class schools had higher levels of anxiety in the sub-dimensions of factors supporting reading, reading comprehension and analysis compared to students from upper class schools. The study also indicated that students' reading anxiety increased as they moved from one class to another.

Keywords: Reading, Anxiety, Reading anxiety

1. Introduction

Reading is a process in which the reader tries to understand a text, tries to come up with new meaning based on what he/she has read and already knows; it is an opinion exchange between a reader and a writer which takes place in a suitable environment (Akyol, 2007: 15). Reading is the process of making sense of the letters which symbolize sounds in the brain. Human beings have produced certain works to showcase their existence and to maintain their existence. The invention of writing is the result of such an endeavor. The most important component which makes the invention of writing meaningful is reading. Without reading we cannot talk about importance of writing and vice versa.

There are a number of factors required for reading to take place. First of all, written material is needed. In order for this written material to be read, necessary readiness should be in place. In addition to the physical equipment required for reading, skills such as alphabet identification, production of sounds in the alphabet and combining these sounds should be developed. Therefore, the ability to read is also associated with brain development. Reading is the biggest contributor to mental developments as it includes activities such as thinking, perception, and meaning-making.

Individuals who acquire the ability to read are in a position to learn on their own. Learning takes place mostly by reading. A student who does not understand what he/she reads cannot be expected to be successful in his/her classes. Reading is in a way an activity with a higher priority than other activities, it is a prerequisite.

What sort of problems are encountered in the acquisition and development of reading ability which is one of the main abilities such as listening, speaking and writing on which learning is grounded? The main question of this study “What type of anxieties are felt by individuals in the reading process?” can be asked at this point.

Anxiety is one of the main factors affecting learning. Anxiety, which makes learning harder, is an important issue requiring attention to increase success in education. Anxiety can be briefly defined as a form of fear whose source is unclear (Baltaş, 1998: 118). Freud (1936) defines anxiety as “an unpleasant emotional state including delusion, tension, and worry and physiological arousal”. (Han, 2009; Spielberger and Reheiser, 2004). Anxiety stems from genetic and biological factors, learning, experiences and the stimuli in the living environment (Cloninger, 1988; Kutlu, 2001:12). Human beings are social creatures. While we read to maintain our daily social lives, some social variables also cause some anxieties related to the reading skill. Why do we have anxieties when we read? According to Pekrun et al. (2011), anxiety research must include the motivational dimension in addition to the affective, physiological and cognitive dimensions.

Reading anxiety is a research field that has attracted the interest of researchers in recent years. Reading anxiety is a personal phobia related to the act of reading. While some readers experience this anxiety at a minimum level, some experience it profoundly. When the act of reading is taking place, it might be expected for students to show physical and cognitive symptoms such as sweating, trembling hands, fast breathing, helplessness, and low self-esteem (as cited in Jalango and Hirsh, 2010). Therefore, during in-class readings, a student with reading anxiety will avoid reading.

Studies on reading and anxiety have generally focused on second language acquisition. There have been some studies trying to determine the relationships between anxiety and difficulty in reading, reading speed, correct and complete reading and reading with comprehension in mother tongue teaching. In light of these studies, it is seen that reading anxiety is a phenomenon requiring attention.

2. Method

This study employs a descriptive survey model in order to identify students’ reading anxiety with regards to certain variables. With the study, the existing state is presented as it is and student views are tried to be described according to sub-dimensions of reading anxiety (planning of reading process, factors supporting reading, reading comprehension and analysis).

2.1 Aim of the Study

The aim of this study is to determine students’ views on reading anxiety with regards to some variables. The sub-goals determined in line with this aim are as follows:

1- What is the level of students’ views on planning of reading process, factors supporting reading, reading comprehension and analysis?

2- Do the views of students on planning of reading process, factors supporting reading, reading comprehension and analysis differ in accordance with the gender variable?

3- Do the views of students on planning of reading process, factors supporting reading, reading comprehension and analysis differ in accordance with the socio-economic status variable of the school?

4- Do the views of students on planning of reading process, factors supporting reading, reading comprehension and analysis differ in accordance with the class level variable?

2.2 Universe and Sample

The universe for the study consists of three secondary school students in a city center in Central Anatolia Region in Turkey. Stratified sampling is preferred in sample selection. In this regard, while selecting the sample, socio-economic status of schools were considered and one upper class, one middle class, and one lower class school were selected according to statistical information about the schools received from Directorate of National Education of the city. Personal information on students who participated in the study is listed in the table below.

Table 1. Personal information on students

School type	f	%
Upper	190	37.1
Middle class	176	34.4
Lower	146	28.5
Gender		
Male	258	50.4
Female	254	49.6
Class Level		
5th grade	142	27.7
6th grade	132	25.8
7th grade	118	23.1
8th grade	120	23.4
Total	512	100

The analysis of the table indicates that according to school types, 190 students (37.1%) from high socio-economic level schools, 176 students (34.4%) from middle socio-economic level schools and 146 students (28.5%) from low socio-economic schools participated in the research. The students comprised of 258 (50.4%) male students and 254 (49.6%) female students. The distribution of students participating in the research by class is as follows: 142 (27.7%) are 5th graders, 132 (25.8%) 6th graders, 118 (23.1%) 7th graders and 120 (23.4%) 8th graders.

2.3 Data Collection Tool

Melanlioglu's (2014) "Reading Anxiety Scale", a 5 point likert scale consisting of 14 questions, was used in the study. The KMO value of the scale is determined to be 0.913 and Bartlett test ($X^2 = 1370.982$, $sd=91$, $p=,000$) indicates it to be significant. The scale consists of following sub-dimensions: planning of reading process, factors supporting reading, reading comprehension and analysis. The total variance explained by the scale is calculated as 55.166%. Cronbach Alpha internal consistency coefficient of the entire scale is 0.870. Coefficients for sub-dimensions are as follows: planning of reading process coefficient is 0.814, factors supporting reading coefficient is 0.831 and reading comprehension and analysis coefficient is 0.612. The goodness of fit values calculated after the confirmatory factor analysis of the scale are as follows: RMSEA= 0.034, SRMR= 0.045, GFI= 0.96, AGFI= 0.94, CFI= .99 NFI= 0.97.

2.4 Data Collection and Analysis

After necessary permission are received from Directorate of National Education, the scale was applied to students in the sample group and data was collected. Students were instructed on how to fill out the survey and they were asked to fill it candidly. Participants in the study were determined based on voluntary basis. The data gathered was analyzed by importing it to SPSS package program. Percentage and frequency techniques were employed in the analysis of personal information. The homogeneity of variances in the comparison related to the gender variable was tested. The distribution appeared to be normal and t-test was used. In the comparisons between a school's socio-economic level and class level variables, goodness of fit test was used to whether there was normal distribution. In cases of normal distribution, one way ANOVA was applied whereas in cases of non-normal distribution Kruskal Wallis H (KWH) tests were applied. As a result of the one-way variance analysis, LSD test was applied when there was a significant difference. After KWH test results, Mann Whitney U (MWU) test was applied to determine a significant difference. During the interpretation of arithmetic mean, the average values between 1.00-5.00 are defined as follows: Always: 4.21-5.00; Usually: 3.41-4.20; Sometimes: 2.61-3.40; Rarely: 1.81-2.60; Never: 1.00-1.80. Significance values is taken to be .05 in the statistical analyses employed in the study.

3. Findings and Interpretation

In this part, the findings and discussions derived from the study on students' anxiety levels regarding planning of reading, process factors supporting reading, reading comprehension and analysis and the comparisons between school type, gender and class level are presented. Arithmetic mean and standard deviation values regarding sub-dimensions of reading anxiety are given in the table below.

Table 2. Arithmetic mean and standard deviation values regarding the sub-dimensions of reading anxiety.

Sub-dimension	\bar{X}	sd
planning of reading process	2.52	0.95
factors supporting reading	2.05	0.97
reading comprehension and analysis	3.10	0.92

The analysis of the table indicates that the highest number of views were expressed on reading comprehension and analysis ($\bar{X}=3.10$) sub-dimension by the students. Students' views on this sub-dimension are found to be at the "sometimes anxious" level. The results of the study indicate that students "rarely" had anxiety in sub-dimensions of planning reading process and factors supporting reading. According to this, students feel anxious about reading comprehension and analysis at a higher level compared to the other sub-dimensions.

The arithmetic mean and standard deviation values related to the student answers to the items in the "planning of reading process" sub-dimension are given in the table below.

Table 3. Arithmetic mean and standard deviation values regarding the sub-dimension of planning of reading anxiety

Item No	Planning of reading process	\bar{X}	sd
1	I feel worried when I cannot identify the key words in the text.	2.86	1.37
2	I feel worried if I do not identify what I am going to do as I read.	2.61	1.43
3	I feel worried if I cannot guess how long it will take me to read the text.	2.15	1.38
4	I feel anxious when I cannot decide from whom to seek help if I do not understand the text.	2.29	1.44
5	I feel worried when I cannot guess what I am going to need while I read.	2.36	1.35
6	I feel worried when I cannot decide on how to read the text.	2.44	1.41
7	I feel anxious when I cannot make inferences from the text.	2.93	1.46
Total		2.52	0.95

When the student views related to their anxiety regarding the planning of reading process in Table 3 are analyzed, it is observed that the highest number of views were expressed on "I feel anxious when I cannot make inferences from the text" ($\bar{X}=2.93$), "I feel worried when I cannot identify the key words in the text" ($\bar{X}=2.86$) and "I feel worried if I do not identify what I am going to do as I read", whereas they expressed their views on these items at the "sometimes anxious" level. On the other hand, they agreed with the other items at the "rarely anxious" level. According to this result, it can be suggested that students experience anxiety at a medium level when they plan the reading process. The arithmetic mean and standard deviation values related to the student answers to the items in the "factors supporting reading" sub-dimension are given in the table below.

Table 4. Arithmetic mean and standard deviation values regarding the sub-dimension of factors supporting reading anxiety

Item No	Factors supporting reading	\bar{X}	sd
1	I worry that I cannot understand the text when there is no visual related to the text such as picture, caricature etc.	2.14	1.41
2	I have difficulty understanding the text when the font size is small.	2.06	1.29
3	I have difficulty understanding the text when the font is different (italic letters or upright letters).	1.96	1.26
Total		2.05	0.97

When the anxieties of the students related to factors supporting reading in Table 4 are analyzed, it is observed that the highest number of views were expressed on the item "I worry that I cannot understand the text when there is no visual related to the text such as picture, caricature etc." ($\bar{X}=2.14$) Following this item consequently are the items "I have difficulty understanding the text when the font size is small" ($\bar{X}=2.06$) and "I have difficulty understanding the text

when the font is different (italic letters or upright letters)” ($\bar{X}=1.96$). Students expressed their views on the items in this sub-dimension at the “rarely anxious” level. According to this result, it can be stated that students do not feel too anxious about factors supporting reading. The arithmetic mean and standard deviation values related to the student answers to the items in the “reading comprehension and analysis” sub-dimension are given in the table below.

Table 5. Arithmetic mean and standard deviation values regarding the sub-dimension of reading comprehension and analysis anxiety

Item No	Reading comprehension and analysis	\bar{X}	sd
1	I do not feel comfortable if I cannot remember anything about the text after reading.	3.44	1.27
2	I feel anxious when I do not understand the text although I know the meaning of the words in it.	3.09	1.32
3	I feel anxious if I cannot determine the genre of the text I am reading.	2.92	1.37
4	I do not feel comfortable when I cannot determine the main idea of the text I am reading	2.96	1.40
Total		3.10	0.92

When the anxieties of the students related to factors reading comprehension and analysis in Table 5 are analyzed, it is observed that the highest number of views were expressed on the item “I do not feel comfortable if I cannot remember anything about the text after reading” ($\bar{X}=3.44$). Students agreed with this item at the “generally anxious” level. On the other hand, they expressed their views at the “sometimes anxious” level on the following items: “I feel anxious when I do not understand the text although I know the meaning of the words in it” ($\bar{X}=3.09$), “I do not feel comfortable when I cannot determine the main idea of the text I am reading” ($\bar{X}=2.96$)” and “I feel anxious if I cannot determine the genre of the text I am reading” ($\bar{X}=2.92$). According to this result, it might be stated that students experience anxiety at medium level regarding reading comprehension and analysis. The t-test results related to reading anxiety according to the gender variable are given in the table below.

Table 6. t- Test Results for the Gender Variable

Sub-dimension	Gender	n	\bar{X}	sd	sd	Levene		t	p
						F	p		
Planning of reading process	Male	258	2.41	0.93	510	0.116	0.734	-2.528*	0.012
	Female	254	2.62	0.96					
Factors supporting reading	Male	258	2.11	1.03	510	1.504	0.221	1.254	0.210
	Female	254	2.00	0.95					
Reading comprehension and analysis	Male	258	2.96	0.89	510	0.006	0.938	-6.214*	0.000
	Female	254	3.25	0.90					

*p<0.05

According to the findings in Table 6, there was no statistically significant difference with regards to the gender variable in the anxiety sub-dimension of factors supporting reading. On the other hand, there was a significant difference in the student views with regards to the anxiety sub-dimensions of planning of reading process and reading comprehension and analysis. It was determined that the anxiety level of female students was at a higher level compared to male students in these sub-dimensions. The variance analysis results related to the anxiety sub-dimensions of planning of reading process according to the variable of socio-economic level of the school are below.

Table 7. Analysis of Variance (ANOVA) Results Regarding Schools' Socio-economic Level

Sub-dimension	Socio-economic Level	n	\bar{X}	sd	F	p	LSD
Planning of reading process	upper class	190	2.11	0.86	48.600	0.000*	3-2,1 2-1
	middle class	176	2.51	1.02			
	lower class	146	3.05	0.77			
Levene=1.417		p=0.243					

According to the findings in Table 7, there was a statistically significant difference with regards to the socio-economic level of the schools variable in the sub-dimension of planning of reading process anxiety ($p < 0.05$). After an LSD test was applied to determine which groups differed, it was found that there was a significant difference in favor of students in lower and middle class socio-economic level schools. It can be stated that students from lower to middle class schools have higher levels of anxiety in the planning of reading process compared to students from upper class schools. KWH Test results are presented in the table below for the sub-dimensions of factors supporting reading and reading comprehension and analysis.

Table 8. KWH Test Results Regarding Schools' Socio-economic Level

Sub-dimension	Socio-economic Level	n	Mean Rank	sd	KWH	p	MWU
Factors supporting reading	upper class	190	187.81	2	70.201	0.000	3-1,2 2-1
	middle class	176	283.48				
	lower class	146	313.38				
Levene=6.082		p=0.002					
Reading comprehension and analysis	upper class	234	210.09	2	34.347	0.000	3-1,2 2-1
	middle class	254	268.22				
	lower class	140	302.77				
Levene=5.460		p=0.005					

According to Table 8, significant differences were observed in both sub-dimensions in the KWH Test which was applied to identify the effect of the socio-economic level of the school on factors supporting reading and reading comprehension and analysis ($p < 0.05$). It can be stated that students from lower to middle class schools have higher levels of anxiety in both sub-dimensions compared to students from upper class schools. Based on these findings, it can be stated that students from lower to middle class schools had higher levels of anxiety in the sub-dimensions of factors supporting reading, reading comprehension and analysis compared to students from upper class schools. Variance analysis results regarding the sub-dimension of reading comprehension and analysis anxiety depending on the class level variable are presented in the table below.

Table 9. Analysis of Variance (ANOVA) Results Regarding Class Level

Sub-dimension	Class Level	n	\bar{X}	sd	F	p	LSD
Reading comprehension and analysis	5	142	2.96	0.93	2.867	0.036*	2,3-1
	6	132	3.22	0.80			
	7	118	3.22	0.96			
	8	120	3.02	0.97			
Levene= 2.469		p=0.061					

According to the findings in Table 9, there is a significant difference between class level and students' reading comprehension anxiety ($p < 0.05$). An LSD test was applied to determine which groups differed. It was found that there was a significant difference between 6th-7th graders and 5th graders in favor of 6th-7th graders. Based on this it can be argued that 6th and 7th graders have a higher level of reading comprehension and analysis anxiety compared to 5th graders. This situation might stem from the fact that 6th and 7th graders are in the process of preparing for high school entrance exams. KWH Test results are presented in the table below for the sub-dimensions of planning of reading process anxiety and factors supporting reading anxiety.

Table 10. KWH Test Results Regarding Class Level

Sub-dimension	Class Level	n	Mean Rank	sd	KWH	p	MWU
Planning of reading process	5	142	236.89	3	4.561	0.207	-
	6	132	259.44				
	7	118	257.40				
	8	120	275.60				
		Levene=5.715	p=0.001				
Factors supporting reading	5	142	267.70	3	37.392	0.000*	1-3 4-1,2,3
	6	132	234.53				
	7	118	206.97				
	8	120	316.11				
		Levene=4.247	p=0.006				

According to Table 10, the results of KWH Test for the sub-dimension of planning of reading process did not produce any significant difference ($p > 0.05$). However, a significant difference is observed in the sub-dimension of factors supporting reading anxiety. According to the results of MWU Test which was applied to find out between which groups difference existed, it was found that there was a significant difference between 5th graders and 7th graders in favor of 5th graders; and there was a difference between 5th-6th-7th graders and 8th graders in favor of 8th graders ($p < 0.05$). Based on these findings, it can be argued that 8th graders have a higher level of factors supporting reading anxiety compared to other class levels. According to these findings, it can be argued this situation is due to the fact that 8th graders have the motivation to increase their reading speed and comprehension due to high school entrance exams and also because they feel that reading is an important factor in exams rather than a hobby compared to low level class students who do not feel much exam anxiety.

4. Results and Discussion

The study aimed at figuring whether the results of the study indicate that students “sometimes” had anxiety in reading comprehension and analysis sub-dimensions while they “rarely” had anxiety in the sub-dimensions of planning reading process and factors supporting reading. The results of the study indicate that students expressed most views on the item “*I do not feel comfortable if I cannot remember anything about the text after reading.*” ($\bar{X} = 3.44$) Students expressed their views at “generally anxious” level regarding this item.

In this study, there was no statistically significant difference detected with respect to the gender variable in the anxiety sub-dimension of factors supporting reading. However, there was a significant difference in the student views in the anxiety sub-dimensions of planning of reading process and reading comprehension and analysis. It was found that anxiety level of female students was higher than that of male students in these sub-dimensions. In a similar study, Gundemir (2002) measured the reading comprehension skills of his 8th grade students and he found that female students were more successful than male students. In another study, Sert (2010) stated that reading comprehension levels of students have a significant relation with anxiety levels and gender variables in 6th grade Turkish course. These results indicate that gender variable may have an effect on the anxiety levels of students. However, one can also come across with different results in the literature. For instance, in the study by Saracaloglu, Dedeali and Karasakaloglu (2011), there was no significant difference in the reading speed and reading comprehension levels of 8th grade students with respect to gender. This might result from the fact that gender variable is a factor effecting the results depending on parameters such as sample and the topic of a study.

In the study, it was observed that the students from low and middle socio-economic level schools had higher levels of anxiety in factors supporting reading and reading comprehension and analysis compared to students from high socio-economic level schools. Similar to these results, Dokmen (1994) also concludes that students from high socio-economic level have higher reading speeds and comprehension level compared to students from low socio-economic level. The same results are also observed in Celenk and Caliskan’s (2004) study on the 5th graders. In their study, it was observed that students with families who had high socio-economic level and cultural background, had higher reading comprehension levels. This finding observed in the present study and in other studies proves that socio-economic level affects anxiety levels for factors supporting reading and reading comprehension and analysis.

The study also investigated students' views on reading anxiety based on their class levels. The views analyzed indicate that middle school students' anxiety levels increase as their class level increases. In this context, it was observed that 5th graders had the lowest level of anxiety in the sub-dimension of factors supporting reading and reading comprehension and analysis whereas 8th graders had higher levels of anxiety in all sub-dimensions compared to other class levels. Explanations for this increased anxiety from lower classes to higher classes are present in the studies in the literature. In a study on the general anxiety levels of middle school students, Yaman (2014) states that students might carry over the negative failures and their effects in their first writing experiences to their later experiences and school years and therefore their anxiety levels might increase. That also holds true for students with reading anxiety. Students who have difficulty in reading in the initial years of primary school might have increased reading anxiety towards reading and reading intensive social classes in middle school. Reading anxiety, which generally stems from difficulties in reading and reading comprehension, especially affects the students who read aloud in class negatively. Melanlıoğlu (2014) and Celikturk and Yamac (2015) state that these anxieties might influence students' reading habits negatively and that therefore identifying these reading anxieties students face early on might contribute to the prevention of such negative outcomes. In this regard, the present study might contribute to the implementation of measures to prevent carrying these anxieties over to later years by showing which variables affect the reading anxiety of middle school students.

Suggestions according to the research result are the following:

- Focus group talks can be held with different age groups in order to determine the reading anxieties.
- Experimental studies can be conducted in order to reduce reading anxiety.
- Students' views for courses in which reading anxiety is experienced might be investigated or studies can be carried out to prevent negative attitudes classes in which reading anxiety is experienced.

References

- Akyol, H. (2007). *İlköğretimde Türkçe öğretimi*. Kırkilic, A. ve Akyol, H. (Ed.). Ankara: Pegem A Yayıncılık.
- Baltas, A., Baltas, Z. (1998). *Stres ve basıncı çıkma yolları*. Remzi Kitabevi. İstanbul
- Celenk, S. ve Caliskan M. (2004). Bazı sosyo-ekonomik faktörlerin okudugunu anlama başarısına etkisinin incelenmesi. *Cagdas Egitim Dergisi*, (309), 24-33.
- Celikturk, Z., & Yamac, A. (2015). İlkokul ve ortaokul öğrencileri için okuma kaygısı olceğinin geliştirilmesi: geçerlik ve güvenilirlik çalışması. *İlköğretim Online*, 14(1). 97-107
- Dokmen, Ü. (1994). *Okuma becerisi, ilgisi ve alışkanlığı üzerine psiko-sosyal bir araştırma*. Ankara: MEB Yayınları. İstanbul.
- Gündemir, Y. (2002). *İlköğretim sekizinci sınıf öğrencilerinin okudugunu anlama becerilerinin gelişimlerinin ölçülmesi*. (Unpublished master's thesis), Gazi Üniversitesi Eğitim Bilimleri Enstitüsü, Ankara.
- Han, H. R. (2009). Measuring anxiety in children: A methodological review of the literature. *Asian Nursing Research*, 3(2), 49-62. [http://dx.doi.org/10.1016/S1976-1317\(09\)60016-5](http://dx.doi.org/10.1016/S1976-1317(09)60016-5)
- Jalongo, M. R., & Hirsh, R. A. (2010). Understanding reading anxiety: New insights from neuroscience. *Early Childhood Education Journal*, 37(6), 431-435. <http://dx.doi.org/10.1007/s10643-010-0381-5>
- Kutlu, Ö. (2001). Ergenlerin üniversite sınavlarına ilişkin kaygıları, *Eğitim ve Bilim*, (121).
- Melanlıoğlu, D. (2014). Okuma kaygısı olceğinin psikometrik özelliklerinin belirlenmesi. *Eğitim ve Bilim Dergisi*, 39(176), s.95-105.
- Pekrun, R., Goetz, T., Frenzel, A.C., Barchfeld, P., & Perry, R.P.(2011). Measuring emotions in students' learning and performance: the achievement emotions questionnaire (AEQ). *Contemporary Educational Psychology* 36, 36-48. <http://dx.doi.org/10.1016/j.cedpsych.2010.10.002>
- Saracaloğlu, A. S., Dedeşali, N. C., & Karasakaloğlu, N. (2011). Sekizinci sınıf öğrencilerinin sessiz okuma hızları ve okudugunu anlama düzeyleri. *Ahi Evran Üniversitesi Eğitim Fakültesi Dergisi*, (12), 177-93.
- Sert, A. (2010). *İlköğretim altıncı sınıf öğrencilerinin okudugunu anlama becerilerinin bazı değişkenler açısından incelenmesi*. (Unpublished master's thesis), Selçuk Üniversitesi Eğitim Bilimleri Enstitüsü, Konya.
- Yaman, H. (2014). Ortaokul öğrencilerinin genel kaygı düzeyleri, yazma kaygıları ve Türkçe dersine yönelik tutumları arasındaki ilişki. *Kuram ve Uygulamada Eğitim Bilimleri* 14(3). 1111-1122.