



Impact of Metacognitive Strategies Instruction on Secondary School Students' Reading Anxieties

Deniz Melanlıoğlu¹

Abstract

Although reading is the skill that is most used by students in their personal development, reading education does not produce the desired outcomes due to the multiplicity of variables that shape the skill of reading. One of these variables is reading anxiety. In order to prevent reading anxiety from affecting students' competence in reading comprehension, firstly, the levels of reading anxiety experienced by students as well as the causes of reading anxiety should be examined. It is necessary to enhance students' levels of awareness about their own reading processes, before starting the activities to eliminate reading anxiety. Metacognitive strategies can be used in this process of awareness-raising. Departing from this point, the aim of this research was to determine the impact of metacognitive strategies instruction upon students' reading anxieties. In the research, the quasi-experimental method with pretest-posttest, and control group was employed. The study group of the research consisted of six-grade students attending a public secondary school in Ankara. The Reading Anxiety Scale for Secondary School Students (RASS) was employed to collect the data. It is concluded, based on research findings, that making use of metacognitive strategies in reading education has a positive impact on reducing levels of reading anxiety among secondary school students.

Keywords

Turkish language education
Reading skill
Reading anxiety
Metacognitive strategies
instruction

Article Info

Received: 06.14.2014
Accepted: 11.07.2014
Online Published: 12.16.2014

DOI: 10.15390/EB.2014.3540

Introduction

Reading, which is defined as recognizing and comprehending the meanings of a text's letters and words (Göğüş, 1978), is one of the most effective ways of systematically enhancing language skills and personality (Özbay, 2007). Reading is a complex process, which involves various functions of eyes, sound and brain, such as seeing, perceiving, vocalizing, comprehending and constructing in the brain (Güneş, 2007). Akyol (2007), who defines reading as the exchange of ideas between the writer and the reader in a suitable environment, lists the following as the components of good reading: level of perception, word recognition (knowledge of meaning), knowledge of sentences, linguistic processes, and comprehension.

Reading is a physiological process in its aspects of seeing and vocalizing, a psychological process in terms of comprehension, and a sociological process in terms of meaning-making (Özbay, 2006; Demirel, 1999). Therefore, it has a complex structure. When acquiring this complex structure,

¹ Kirikkale University, Faculty of Education, Turkish Education Department, Turkey, denizmelanlioglu@hotmail.com

students experience various reading problems (Vacca et. al., 2006; Günay, 2008). Studies have found that these problems are related not to physical inabilities, but to the ways teaching activities are designed (Darke, 1988; Borkovec, 1994). If such problems are not eliminated, they might lead to negative attitudes towards reading, and thus to reading anxiety.

Reading Anxiety

Since language acquisition is a cognitive and affective process (Abu-Rabia, 2004), it is seen that anxiety is an important affective factor that influences language learning (Dörnyei, 1998; Horwitz, Horwitz and Cope, 1986; Gardner, 1985). Anxiety is regarded as a complex and multidimensional notion in the process of language learning (Lien, 2011; MacIntyre and Gardner, 1991; Young, 1991); and it is defined as a state of nervousness that an individual develops in the face of harmful situations (Bandura, 1997), and as a feeling that the individual has when faced with a latent danger or a situation perceived as dangerous (Işık, 1996). Anxiety, which usually emerges at early ages, might pave the way for various psychological problems in later stages of life unless it is tackled and overcome (Lavigne et al., 2009).

It could be argued, then, that by determining younger students' levels of anxiety about skills, first language education can be given more effectively, and their skills of listening, speaking, reading and writing can be turned into habits. Reading occupies a central position in first language education and it is defined as the main skill that the student will make use of throughout the rest of her life (Dündar and Akyol, 2014). In this respect, it is addressed separately from other language skills.

Reading anxiety, which is a reaction developed against reading, can manifest itself not only in situations in which reading is required such as a classroom reading activity or an exam, but also as abstinence from reading (Goldston et al., 2007; Torgesen, 2000). The reasons behind reading anxiety can be summarized as follows: personal and interpersonal anxieties, acquired beliefs about reading, teachers' perception of reading, teacher-student interactions, classroom rules, and exam anxiety (Bell and Perfetti, 1994; Koizimu, 2002). These reasons can be diversified when individual differences are considered.

High levels of anxiety blocks the comprehension mechanism in the brain and thus hinders the process of reading (Carpenter, Miyake and Just, 1995). Pre-reading anxieties divert attention from reading and render the comprehension of the text impossible. Then, the student's self-perception about reading gets harmed, and she sees herself as failing (MacIntyre, 1995). The relationship between reading performance and reading anxiety is closely linked with the level of reading anxiety (Sellers, 2000; Zin and Rafik-Galea, 2010). Students with high levels of anxiety have difficulty in recalling what they have read and they participate in classroom reading activities less actively (Sellers, 2000; Lien, 2011). This condition is also observed in reading-based exams, as students with high levels of reading anxiety score lower in such exams (Ergene, 2003). On the other hand, students with lower levels of anxiety perform better in reading (Saito, Horwitz and Garza, 1999).

It is necessary to take the reading process as the basis when a teacher diagnoses reading anxiety and determines the procedures to be followed in order to reveal its dimensions and to eliminate them (Sellers, 2000; Zin and Rafik-Galea, 2010). Therefore, factors that could cause reading anxiety should be classified under three stages: before, during, after reading. These three stages should be taken into consideration when planning the activities to be performed in order to eliminate reading anxiety. For in the process of reading the reader encounters various problems such as inability to identify the purpose of reading, inability to identify and execute the proper strategy, inability to assess what is read, and inability to link what is read with personal experiences (Çakıroğlu, 2007). The incongruity between activities and the teaching objective in question is regarded as the reason lying beneath the above-listed problems (Ilustre, 2011). In order to enhance reading motivations of students with higher reading anxiety and to enable them to actively participate in activities, characteristics of the successful reader profile should also be taken into consideration (Lawrence, 2007). For example, successful readers read strategically. Seeing it as a requirement of reading that is an active process, they try to read every day using reading strategies (Akyol, 2007). On the other hand, students who cannot come up with reading strategies that are in line with their reading objectives fail to

comprehend texts, develop negative attitudes towards reading, and thus have higher levels of reading anxiety (Oh, 1990). In cases in which the level of anxiety is high, the teacher should know how to use diverse strategies in the process of improving the skill of reading (Eysencek, 1992; Gomari and Lucas, 2013). The primary strategy that a teacher can employ in order to prevent reading anxiety is metacognition, which plays significant roles in areas such as communication, reading comprehension, language education, attention, self-control, memory, self-instruction, writing, and problem solving (Flavell, 1979).

Metacognition in Reading

Metacognition, which is defined as thinking about thinking, refers to the awareness and arrangement of thinking processes that students make use of in situations of planned learning and problem solving (Flavell, 1976; Brown, 1978). While cognitive processes involve the acquisition and use of knowledge, metacognition refers to the awareness of the individual about what she does in the process, how she does it, as well as the stages of the process and its outcomes. It could be stated that metacognitive awareness involves the skills of knowing what to learn and how to learn it, developing a system of thinking, and as a result, learning to learn (Çakıroğlu, 2007).

Metacognition has two main components: metacognitive knowledge and metacognitive control (Garofalo and Lester, 1985; Schraw and Moshman, 1995). Component of the latter are estimation, planning, monitoring, and evaluation, which are also referred to as metacognitive strategies (Schraw, 1998). The first stage in metacognitive control is estimation, which enables the individual to ask herself several questions about the objectives of the learning process, duration of the process, and the outcomes of the process. On the other hand, planning involves the selection of appropriate strategies, designing of the reading process, and identification of the path to be followed for a good performance. Monitoring refers to the student's healthy analysis of her own reading process, inference about her subsequent performance, evaluation of the efficiency of strategies, and identification of mistakes (Schraw and Moshman, 1995). The monitoring strategy can be seen as the main component of success, since it guides the process of selecting proper strategies for the learning process as well as replacing them with better ones when needed. However, it should be kept in mind that, compared to other metacognitive strategies, the development of monitoring is highly slow and weak in children, and even in adults (Schraw, 1998). Finally, evaluation involves students' judgments about their learning success and the quality of knowledge acquired. These strategies are consecutive processes that individuals follow in cognitive activities. These processes help regulate and control learning, and they involve the planning and monitoring of cognitive practices (Özsoy, 2007, p. 20).

When reading comprehension and metacognitive strategies are addressed together, it becomes reasonable to think that classifying them under the following three main categories will be more functional in terms of endowing students with them: "before reading," "during reading," and "after reading." In order to execute the instruction based on this classification, it is necessary to take into consideration factors such as reading skill, reading process, level of students, course objectives, materials to be used, the way the course is taught, and the evaluation of reading comprehension.

There are students who do read but who experience difficulties in remembering what they read. These students have no problem in reading, however, they fail to recount what happens in their minds related to the text they read. These students, who cannot complete their mental processes, experience difficulties due to their lack of metacognitive skills, and often this problem culminates in feelings of reading anxiety. The strategies that reinforce comprehension in reading can be listed as follows:

- a. Defining the reading objective, and determining reading strategies that are in line with the objective.
- b. Mobilizing earlier knowledge of the material to be read, and linking them to what is read.
- c. Monitoring the reading process.
- d. Evaluating the reading material and the reading process.

The teacher should act as a model in endowing students with these strategies. The teacher can think out loud in the classroom for the process to be implemented. This way, students can have a sense of how to follow and memorize the learned material as well as of what kind of questions to ask. In the planning stage, the teacher chooses the material to be read and the metacognitive strategies that fit to its structure. In the next stage, before reading the text, the student asks questions about it. Here, the aim is to make the student think about her relevant prior knowledge, in order to enable her to become aware of what she should do to comprehend and retain the text in her memory. In teaching strategies, the teacher can also provide verbal guidance. During the activity, the teacher can suggest strategies that are congruent with the genre of the text. Moreover, this stage requires the reader to foresee and evaluate certain parts of the text. The teacher can follow the following stages when teaching metacognitive strategies:

- a. Identifying the strategy to be taught.
- b. Acting as a model for the strategy in question.
- c. Guiding and leading the activity when overseeing students .
- d. Giving feedback to the student and asking other students also to give feedback (Bonds, Bonds and Peach, 1992).

All these stages should be assessed separately. The teacher should provide the necessary guidance for the student to summarize the text, discuss it with peers, and integrate her previous experiences with new knowledge. This way, the student whose metacognitive skills have improved will become more competent in the process of reading. A reader with strong metacognitive skills possess the abilities to estimate, plan, monitor and evaluate, as well as identifying and correcting mistakes. The metacognitive skills related to reading that can be acquired can be summarized as follows: Identifying the reading objective, grasping the message that the text intends to deliver, monitoring the reading process, determining at the end of the reading process whether the objectives have been met or not, and evaluating the mistakes made in the process.

If the teacher does not instruct how to use metacognitive strategies in reading and expects students to learn how to use them themselves, it is impossible to obtain the desired outcomes (Onovughe ve Hannah; 2011). Teachers should teach metacognitive strategies to their students and enable them to act independently when using these strategies in reading and comprehension. This way, the student becomes capable of coping with difficult reading tasks that she may encounter. Otherwise, she would experience low self-confidence due to her bad performance and have a higher level of anxiety.

Extreme anxiety should be regarded as a factor that negatively affects reading comprehension. Having such levels of anxiety throughout one's life limits new learning and utilization of prior knowledge. Therefore, studies to be conducted on levels of anxiety will provide teachers and researchers with new perspectives. In this respect, the aim of this study is to determine the impact of metacognitive strategies upon secondary school students' levels of reading anxiety. With this aim, the sub-problems of the study are determined as:

1. What are the reading anxiety levels of students in experimental and control groups prior to metacognition strategies training? Is there a significant difference in students' reading anxiety levels?
2. What are the reading anxiety levels of students in experimental and control groups after metacognition strategies training? Is there a significant difference in students' reading anxiety levels?
3. Is there a significant difference in reading anxiety levels of students in experimental group before and after metacognition training?
4. Is there a significant difference in reading anxiety levels of students in control group?

Method

Research Design

In this research, the aim of which is to determine the effect of metacognitive strategies instruction on secondary school students' reading anxieties, the quasi-experimental method with pretest-posttest, and control group was employed. Sometimes, it is not possible to create artificial groups due to the problems arising from the environment where the research is to be carried out. Thus, the researcher has to impartially pick one group as the experimental and another as the control group. In both groups, measurements are performed before and after the experiment (Karasar, 2005; Büyüköztürk, 2004). In this respect, in quasi-experimental research, the selection of groups is performed in an unbiased manner whereas the assignment of participants to these groups is biased (Creswell, 2005). In other words, the quasi-experimental method involves an approach in which participants are assigned to the experimental and control groups in a non-random way (Creswell and Clark, 2008). Since the research was conducted in a public school and since it is not possible to form artificial classrooms in such schools, students could not be randomly assigned to the experimental and control groups. However, among the existing groups, one group was randomly selected as the experimental group and another as the control group. The symbolic demonstration of the quasi-experimental design employed in this research is presented in Table 1.

Table 1. Quasi-Experimental Research Design with Pretest-Posttest and Control Group

Group	Pretest	Experimental Operation	Posttest
Experimental	Reading Anxiety Scale	Reading activities performed with metacognitive strategies instruction	Reading Anxiety Scale
Control	Reading Anxiety Scale	Reading activities based on the Turkish Language Education Program	Reading Anxiety Scale

Study Group

The study group of the research consisted of 60 sixth-grade students enrolled in Halide Edip Secondary School, which is located in the Cankaya District of Ankara, in the 2013-2014 Academic Year. The "Reading Anxiety Scale for Secondary School Students" was administered to four of the sixth-grade sections of this school, who had well-matched classroom sizes, gender distributions. These students also have similar academic grades from the Turkish language course at the end of term. Through analyses, two sixth-grade sections, whose levels of reading anxiety were not significantly different from each other, were identified. Then, one of these sections was randomly defined as the experimental group, whereas the other as the control group. Distribution of students in the study group by gender is presented in Table 2:

Table 2. Distribution of Students in Experimental and Control Groups by Gender

Gender	Experimental Group		Control Group	
	n	%	n	%
Girls	13	43,3	15	50
Boys	17	56,7	15	50
Total	30	100	30	100

As Table 2 shows, the numbers of girls and boys are equal in the control group, whereas the experimental group has more boys (56,7%) than girls (43,3%).

Data Collection Instrument

Reading Anxiety Scale for Secondary School Students (RASS)

For the purpose of determining secondary school students' levels of reading anxiety, the "Reading Anxiety Scale for Secondary School Students (RASS)" was used (Melanlıoğlu, 2014). The scale consists of three sub-dimensions and 14 five-point Likert-type items. The scale's Cronbach's Alpha reliability coefficient was found to be 0,87. When developing the scale, the stages stages can be summarized as follows:

In the stage of *forming an item pool*, the relevant literature was reviewed and secondary school students' essays on reading were examined, in order to produce a draft scale consisting of 32 items. This draft scale was graded in five-point Likert type with the following possible responses: Never, Rarely, Sometimes, Often, and Always. In *assuring content validity*, experts' opinions were taken. The validity of the draft scale in terms of its power to measure secondary school students' levels of reading anxiety was assessed by six experts; five of whom specialized in Turkish Language Education whereas one of whom in Measurement and Evaluation. Based on these experts' opinions, six items were removed and three items were rephrased, resulting in a draft scale with a total of 26 items. In the stage of *applying the assessment instrument*, the draft scale with 26 items was administered to secondary school students who volunteered to participate in the research. Based on these students' feedback, four items were removed. In order to find out whether all the 22 items in the draft scale would be accurately understood by the targeted students, two students were randomly selected from each grade level, who attended the schools where the preliminary test application had been conducted, yet who had not participated in that application. These students were individually asked to read out the draft scale's items and reflect on what they had understood. Eight students reported that they had comprehended the items. It was observed that one item was interpreted differently by six students, and this is why this item was removed from the scale. This way, the scale with 21 items became ready for preliminary test application. In factor analyses, the Varimax rotation technique was used. All analyses were performed using SPSS 22 software. In *determining the reliability of the data collection instrument*, results obtained from item-total test score correlation, Cronbach's Alpha reliability coefficient, and test-retest technique were used. The Cronbach's Alpha reliability coefficient is a measure of the internal consistency between the scale's test scores, and a value equals to or higher than 0.70 is regarded as sufficient for reliability (Şencan, 2005). The following Cronbach's Alpha reliability coefficients were obtained: 0,814 for the first factor; 0,831 for the second; 0,612 for the third; and 0,870 for the entire scale. These values demonstrated that the scale was sufficiently reliable. In the final stage, *the data collection instrument was given its final form* based on the data obtained. The scale had the following sub-dimensions: "planning the reading process," "elements that support reading," and "reading comprehension and analysis."

Data Analysis

In order to identify the tests to be used in analyzing the research data, it was analyzed whether the data were normally distributed or not. According to Büyüköztürk (2007), Shapiro-Wilk Z test is used if the size of the group is smaller than 50. Therefore, Shapiro-Wilk Z test was performed in order to see whether the data were normally distributed or not, and the results are presented in the table below:

Table 3. Shapiro-Wilk Z Test Normality Values of Pretest and Posttest Scores that Experimental and Control Group Students made in RASS

Group	n	Test	RASS	
			z	p
Experimental Group	30	Pretest	.971	.579
		Posttest	.951	.176
Control Group	30	Pretest	.988	.974
		Posttest	.974	.666

Since the data obtained in the research exhibited normal distribution, parametric tests were used. On the other hand, "independent groups t-test" was employed in inquiring whether there was a statistically significant difference between the groups' reading anxiety scores obtained before and after the application, whereas "dependent samples t-test" was performed in order to see whether there were statistically significant differences within the groups.

Experimental Process

In the application process, RASS was administered to both experimental and control groups. The scale which had been administered as pretest was administered again as posttest after the application process. The application stage lasted for a total of eight weeks. The duration of two weeks, which included pretest, preparation, and posttest, is not included in these eight weeks.

Practices in the experimental group were conducted by the Turkish language teacher, so as not to disrupt the classroom's natural atmosphere and not to have in the research results any effect caused by the teacher. For this reason, before starting the practices aimed at metacognition, the teacher was informed about the purpose and content of the research as well as about the procedures to be followed. Moreover, during the applications, feedbacks were provided about the process when needed.

During these applications that lasted for eight weeks, reading texts were addressed in the experimental group using metacognitive strategies. Before the applications, the Turkish language teacher informed experimental group students about the content and activities. The activities that would be performed in the experimental group were planned by the researcher and given to the Turkish language teacher. The aim in these activities was to enable students to control their reading anxieties by using metacognitive strategies and to develop awareness about what to do in order to reduce their levels of anxiety. To this aim, experimental group students were given each week documents about the text that they were going to read. They were asked to carry out the activities specified in these documents.

In the application stage of the research, eight informative texts were used. These texts were excerpted from journals suitable for the level of sixth-grade students. When deciding on these texts, experts' opinions were sought. It was ensured that students would encounter a different metacognitive strategy in each text and be able to practice it. The metacognitive strategies that were instructed to the students in the period eight weeks are the following: setting an objective, deployment of prior knowledge, estimation, planning the reading process, identifying proper genres, methods and techniques, planning the path to be followed when faced with a difficulty, evaluation, and sharing evaluations. On the other hand, we did not intervene in the instruction process in the control group; the reading texts on the course book were covered in line with the acquisitions prescribed by the teaching program. Activities lasts eight weeks on teaching metamemory cannot be explained one by one because of limits of paper. Training related to determining purpose is exemplified:

Week 1: Activities on defining purposes of reading are performed with experimental group students. Thus work sheets are given to students; and asked reading the questions and performing reading to find the answers of these questions. After this activity students are warned that they wouldn't come up like these questions everytime, so they have to ask themselves "Why do I read this text?" "What am I expecting from this reading?" for determining their goals. And also they were informed determining the focus of reading would provide the feeling of comfort. A second work sheet that does not include questions are given to students, and a practice is performed that considered the instructions given with first work sheet. For the eight weeks resuming practices as a convoluted structure was always one of the main focuses of study.

Findings

Findings Related to the Pre-Experimental Process (Inter-groups)

Through pretests performed before the experimental process, levels of reading anxiety in the experimental and control groups were determined. Table 4 demonstrates the results of the independent groups t-test performed.

Table 4. RASS Pretest Results

Dimension	Group	n	\bar{X}	S	sd	t	p
General reading anxiety	Experimental	30	40,03	5,14	58	1,443	,154
	Control	30	37,93	6,08			
Planning the reading process	Experimental	30	18,70	4,54	58	,561	,577
	Control	30	19,30	3,68			
Components that support reading	Experimental	30	7,51	2,29	58	,510	,609
	Control	30	7,12	1,60			
Reading comprehension and analysis	Experimental	30	13,26	3,31	58	1,180	,243
	Control	30	12,30	3,03			

As is seen in Table 4, there is no statistically significant difference between the RASS pretest scores of the two groups ($t_{(58)}=1.443$, $p>0.05$).

Findings Related to the Pre-Experimental Process (Inter-groups)

Posttest was performed in order to determine the groups' progress. Table 5 shows the results of the independent groups t-test which was performed to see whether there was significant difference between the groups.

Table 5. RASS Posttest Results

Dimension	Group	n	\bar{X}	S	sd	t	p
General reading anxiety	Experimental	30	29,60	7,49	58	4,310	,000*
	Control	30	36,73	5,09			
Planning the reading process	Experimental	30	13,80	6,21	58	3,905	,000*
	Control	30	18,86	3,44			
Components that support reading	Experimental	30	5,16	2,90	58	1,64	,106
	Control	30	6,20	1,86			
Reading comprehension and analysis	Experimental	30	10,63	3,89	58	1,14	,259
	Control	30	11,63	2,80			

Table 5 shows that the experimental group significantly differed from the control group at the end of the eight week period in terms of reading anxiety ($t_{(58)}=4,310$, $p<0,05$). It could therefore be concluded that the reading education given to the experimental group students using metacognitive strategies positively influenced them, that is, reduced their levels of reading anxiety.

Findings Related to the Pre- and Post-Experimental Process (Intra-groups)

Following the inter-groups comparisons, the groups' internal progress levels were also examined on the basis of their pretest and posttest scores. To this aim, dependent samples t-test was employed. Table 6 demonstrates the results of the analysis that was carried out in order to determine whether the pretest and posttest scores of the experimental group significantly differed.

Table 6. Results of Analysis on the Difference between Pretest and Posttest Scores of Experimental Group

Dimension	Group	n	\bar{X}	S	sd	t	p
General reading anxiety	Experimental	30	40,03	5,14	29	6,532	,000*
	Control	30	29,60	7,49			
Planning the reading process	Experimental	30	18,70	4,54	29	4,648	,000*
	Control	30	13,80	6,21			
Components that support reading	Experimental	30	7,51	2,29	29	4,666	,000*
	Control	30	5,16	2,90			
Reading comprehension and analysis	Experimental	30	13,26	3,31	29	4,614	,000*
	Control	30	10,63	3,89			

Table 6 shows that there exists a statistically significant difference between the experimental group's reading anxiety pretest and posttest scores ($t_{(29)}=6.532, p<.05$). This could be interpreted as the positive effect is the metacognitive strategies instruction given to them. As can be seen in Table 6, there is a significant difference in experimental group's achievementscores on planning of reading processsub-dimension ($t_{(29)}=4.648, p<.05$), supporting elements of readingsub dimension ($t_{(29)}=4.666, p<.05$), reading comprehensionandanalysis sub-dimension ($t_{(29)}=4.614, p<.05$) after education of metacognitive, too. The results showed that it can be said that reading anxiety level of students who learned rule to reading process with metacognitive strategies is reduced. The same procedure was repeated for the control groups, and the findings are presented in Table 7.

Table 7. Results of Analysis on the Difference between Pretest and Posttest Scores of Control Group

Test	n	\bar{X}	S	sd	t	p
Pretest	30	37,9333	6,08	29	1,094	.283
Posttest	30	36,7333	5,09			

Table 7 demonstrates that there is no statistically significant difference between the control group's reading anxiety pretest and posttest scores ($t_{(29)}=1,094, p>0,05$). This might lead to the conclusion that reading education given on the basis of the teaching program is inadequate in terms of reducing students' reading anxieties.

Discussion and Conclusion

In this study, the impact of metacognitive strategies instruction oriented towards the reading skill upon students' levels of reading anxiety was examined. According to examining of present study's sub problems, there is a significant difference between experimental/treatment and control group's reading anxiety levels in before and after the metacognitive training. Also showed that there is a significant difference in treatment group's scores for sub dimensions of scale by metacognitive training. This situation can be explicated as a sign that students who are been aware of the reading process and rule to reading process, have low reading anxiety level. The findings obtained suggest that using these strategies when reading as part of the first language education has a positive impact in terms of reducing reading anxiety. This conclusion is of importance for the education given to improve the reading skill; because studies demonstrate that high levels of anxiety negatively affect learning and harm the success of learning (Williams, Vickers and Rodrigues, 2002; Murray and Janelle, 2003; Eysenck and Payne, 2006). A student who has underdeveloped reading skill cannot attain desired levels of academic achievement (Buttler, Marsh, Sheppard and Sheppard, 1985; Mills, Pajares and Herron, 2006). Carrel (1998) maintains that reading is more important than other skills for academic achievement. This, however, should not mean that reading is the only prerequisite for academic achievement. If reading anxiety is not addressed at early ages, this anxiety is likely to turn into a serious problem negatively influencing the student's life (Grills-Taquechel, Fletcher, Vaughn and Stuebing, 2012; Torgesen, Wagner and Rashotte, 1994).

Students' inability to recall what they read causes them to develop reading anxiety. This is a consequence of lack of motivation (Armstrong and Rentz, 2002). Students should be given necessary instructions before, during and after reading, so that they can be motivated for reading. When they are faced with a new text, students have to focus their attention. Students with high levels of anxiety divide their attention between the situation faced and their anxiety. Thus, anxious students cannot learn most of what is presented to them, because their attention is directed towards their anxiety rather than the information (Woolfolk, 2007, s. 387). Anxious students experience nervousness, fear, and lack of attention (Chastain, 1975). In order to prevent these problems, students should be given metacognitive strategies instruction so that they can become aware of what they can do when faced with different texts. This way, high levels of anxiety can be reduced. For the use of metacognitive strategies is of importance as it facilitates reading comprehension and positively contributed to the reading skill (Oxford 1990; Mayo, 1993; El-Hindi, 1996; Farahian and Farshid, 2014). A student, who overcomes the problem of reading anxiety by improving his/her self-awareness, can become an advanced reader and thus can accumulate necessary knowledge to shape his/her education and life in general (Özbay and Bahar, 2012).

It is observed that studies on anxiety in language learning are concentrated largely on second language learning. These studies indicate that student performances decline in activities that involve high levels of reading anxiety (Ilustre, 2011). We found no study in the literature that addressed first language education in relation to anxiety. On the other hand, there are numerous works on the use of metacognitive strategies in reading comprehension (Mokhtari and Reichard, 2002; Gelen, 2003; Şen, 2003; Çakiroğlu, 2007; Onovughe and Hannah, 2011; Al – Dawaideh and Al-Saadi, 2013). These studies suggest that metacognitive strategies improve students' reading skills and levels of reading comprehension. Highness of the level of anxiety negatively affects learning, in general, and the development of the reading skill, in particular (Murray and Janelle, 2003). Studies should address not only the causes of this negative effect but also solutions to it. In this study, the possible benefits of metacognitive strategies instruction for the alleviation of anxiety were investigated, and it was found that such an instruction is useful in reducing the level of anxiety. It is believed that studies to be carried out employing different kinds of strategies, methods and techniques will provide new insights into this topic, in particular, and into the wider literature, in general.

References

- Abu-Rabia, S. (2004). Teachers' role, learners' gender differences, and FL anxiety among seventh-grade students studying English as a FL. *Educational Psychology, 24*(5), 711-721.
- Akyol H. (2007). Okuma. *İlköğretimde Türkçe Öğretimi*, Ahmet Kırkkılıç ve Hayati Akyol (Ed.). Ankara: Pegem A Yayıncılık, 15-48.
- Al - Dawaideh, A., & Al-Saadi, İ. (2013). Assessing metacognitive awareness of reading strategy use for students from the faculty of education at the University of King Abdulaziz. *Mevlana International Journal of Education (MIJE)*, 3(4), 223-235. doi:10.13054/mije.13.71.3.4
- Armstrong, S., & Rentz, T. (2002). *Improving listening skills and motivation*. Master of arts action research Project. Saint Xavier University and SkyLight Professional Field-Based Master's Program.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: W. H. Freeman.
- Bell, L. C., & Perfetti, C. A. (1994). Reading skill: Some adult comparisons. *Journal of Educational Psychology, 86*(2), 244-255.
- Borkovec, T. (1994). *The nature, functions and origins of worry*. In G. Davey & F. Tallis (Eds.), *Worrying: Perspectives on theory, assessment and treatment* (5-34). England: Wiley.
- Bonds, C. W., Bonds, L. G., & Peach, W. (1992). Metacognition: Developing independence in learning. *Clearing House, 66*(1), 56-59.
- Brown, A.L. (1978). *Knowing when, where and how to remember: A problem of metacognition*. In R. Galaser (Ed.), *Advances in instructional psychology* (225-223), Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.
- Butler, S., Marsh, H., Sheppard, M., & Sheppard, J. (1985). Seven-year longitudinal study of the early prediction of reading achievement. *Journal of Educational Psychology, 77*, 349-361.
- Büyüköztürk, Ş. (2007). *Sosyal bilimler için veri analizi el kitabı*. (7.Baskı). Ankara: Pegem-A Yayıncılık.
- Büyüköztürk, Ş. (2004). *Sosyal bilimler için veri analizi el kitabı*. (4. Baskı). Ankara: Pegem-A Yayıncılık.
- Carell, P. L. (1998). *Introduction: Interactive approaches to second language reading*. In P. L. Carrell, J. Devine, & D. E. Eskey (Eds.), *Interactive approach to second language reading*. New York: Cambridge University Press.
- Carpenter, P. A., Miyake, A., & Just, M. A. (1995). Language comprehension: Sentence and discourse processing. *Annual Review of Psychology, 46*, 91-120.
- Chastain, K. (1975). Affective and ability factors in second-language acquisition. *Language Learning, 25*, 153-161.
- Creswell, J. W., & Clark, V. L. (2008). *Designing and conducting mixed methods research*. USA: Sage Publications.
- Creswell, J. W. (2005). *Research design: Qualitative, quantitative and mixed methods approaches*. London: Sage Publications, Inc.
- Çakıroğlu, A. (2007). *Üstbilişsel strateji kullanımının okuduğunu anlama düzeyi düşük öğrencilerde erişimi artırımına etkisi*. Yayımlanmamış doktora tezi. Gazi Üniversitesi Eğitim Bilimleri Enstitüsü, Ankara.
- Darke, S. (1988). Anxiety and working memory capacity. *Cognition and Emotion, 2*, 145-154.
- Demirel, Ö. (1999). *İlköğretim okullarında Türkçe öğretimi*. İstanbul: MEB Yayınları.
- Dörnyei, Z. (1998). Motivation in second and foreign language learning. *Language Teaching, 31*, 177-135.
- Dündar, H., & Akyol, H. (2014). Okuma ve anlama problemlerinin tespiti ve giderilmesine ilişkin örnek olay çalışması. *Eğitim ve Bilim, 39*(171), 361-377.
- El-Hindi, A. E. (1996). Enhancing metacognitive awareness of college learners. *Reading Horizons, 36*(3), 214-230.

- Ergene, T. (2003). Effective interventions on test anxiety reduction a meta-analysis. *School Psychology*, 24(3), 313-328. doi: 10.1177/01430343030243004
- Eysenck, M. W. (1992). *Anxiety: The cognitive perspective*. England: Erlbaum.
- Eysenck, M. W., & Payne, S. (2006). *Effects of anxiety on performance effectiveness and processing efficiency*. Unpublished manuscript. Royal Holloway University of London, Egham, Surrey, UK.
- Farahian, M., & Farshid, M. (2014). A reader-response approach to reading: Does it have an effect on metacognitive reading strategies?. *Modern Journal of Language Teaching Methods (MJLTM)*, 4(1), 371-383.
- Flavell, J. H. (1976). *Metacognitive aspects of problem solving*, In L. Resnick (Ed.), *The nature of intelligence* (231-235), Hillsdale, NJ: Lawrence Erlbaum Associates.
- Flavell, J. H. (1979). Metacognition and cognitive monitoring: A new area of cognitive developmental inquiry. *American Psychologist*, 34(10), 906-911.
- Gardner, R. C. (1985). *Social psychology and second language learning: The role of attitudes and motivation*. London: Edward Arnold Publishers.
- Garofalo, J., & Lester, F. K. (1985). Metacognition, cognitive monitoring, and mathematical performance. *Journal for Research in Mathematics Education*, 16(3), 163-176.
- Gelen, İ. (2003). *Bilişsel farkındalık stratejilerinin Türkçe dersine ilişkin tutum, okuduğunu anlama ve kalıcılığa etkisi*. Yayınlanmamış doktora tezi. Çukurova Üniversitesi Sosyal Bilimler Enstitüsü, Adana.
- Goldston, D.B., Walsh, A., Arnold, E.M., Reboussin, B., Daniel, S.S., Erklani, A. et al (2007) Reading problems, psychiatric disorders, and functional impairment from mid- to late adolescence. *Journal of the American Academy of Child & Adolescent Psychiatry*, 46, 25-32
- Gomari, H., & Lucas, R. I. (2013). Foreign language learning motivation and anxiety among Iranian students in the Philippines. *Philippine ESL Journal*, 10, 148-178.
- Göğüş, B. (1978). *Orta dereceli okullarımızda Türkçe ve yazın eğitimi*. Ankara: Gül Yayınevi.
- Grills-Taquechel, A. E., Fletcher, J. M. Vaughn, S. R., & Stuebing, K. K. (2012). Anxiety and reading difficulties in early elementary school: evidence for unidirectional- or bi-directional relations?. *Child Psychiatry & Human Development*, 43, 35-47. DOI 10.1007/s10578-011-0246-1.
- Günay, D. (2008). Neyi, nasıl okuruz ya da okumalıyız?. *Süleyman Demirel Üniversitesi Güzel Sanatlar Fakültesi Dergisi*, 2, 1-13.
- Güneş, F. (2007). *Türkçe öğretimi ve zihinsel yapılandırma*. Ankara: Nobel Yayıncılık.
- Horwitz, E. K., Horwitz, M. B., & Cope, J. (1986). Foreign language classroom anxiety. *Modern Language Journal*, 70, 125-132.
- Ilustre, C. A. P. (2011). Beliefs about reading, metacognitive reading strategies and text comprehension among college students in a private university. *Philippine ESL Journal*, 7, 28-47.
- Işık, E. (1996). *Nevrozlar*. Ankara: Kent Matbaası.
- Karasar, N. (2005). *Bilimsel araştırma yöntemi*. Ankara: Nobel Yayın Dağıtım.
- Koizumi, R. (2002). The effect of motivation, language anxiety, and test anxiety on English proficiency of Japanese junior high school students. *Japan Language Testing Association Journal*, 5, 91-110.
- Lavigne, J., LeBailly, S., Hopkins, J., Gouze, K., & Binns, H. (2009). The prevalence of ADHD, ODD, depression, and anxiety in a community sample of 4-year-olds. *Journal of Clinical Child & Adolescent Psychology*, 38, 315-328.
- Lawrence, L. J. (2007). Cognitive and metacognitive reading strategies revisited: Implications for instruction. *The Reading Matrix*, 7(3), 55-71.
- Lien, H. Y. (2011). EFL Learners' reading strategy use in relation to reading anxiety. *Language Education in Asia*, 2(2), 199-212.
- MacIntyre, P. D. (1995). How does anxiety affect second language learning? A reply to Spark and Ganschow. *The Modern Language Journal*, 79, 90-99.

- MacIntyre, P. D., & Gardner, R. C. (1991) Investigating language class anxiety using the focused essay technique. *The Modern Language Journal*, 75(3), 296- 304.
- Melanlıođlu, D. (2014). Ortaokul ođrencileri iin okuma kaygısı ołeđi: Geerlik ve gvenirlik alıřması. *Eđitim ve Bilim*, 39 (176), 95-105.
- Mayo, K. E. (1993). Learning strategy instruction: Exploring the potential of metacognition. *Reading Improvement*, 30(3), 130-133.
- Mills, N., Pajares, F., & Herron, C. (2006). A revaluation of the role of anxiety: Self-efficacy, anxiety and their relation to reading and listening proficiency. *Foreign Language Annals*, 39(2), 276-295.
- Mokhtari, K., & Reichard, C. (2002). Assessing students metacognitive awareness of reading strategies. *Journal of Educational Psychology*, 94(2), 249-259.
- Murray, N. P., & Janelle, C. M. (2003). Anxiety and performance: A visual search examination of the processing efficiency theory. *Journal of Sport and Exercise Psychology*, 25, 171-187.
- Oh, J. (1990). On the relationship between anxiety and reading in English as a foreign language among Korean university students in Korea. *Dissertation Abstracts International*, 52(5).
- Onovughe, G., & Hannah, A. (2011). Assessing ESL students' awareness and application of metacognitive strategies in comprehending academic materials. *Journal of Emerging Trends in Educational Research and Policy Studies*, 2(5), 343-346.
- Oxford, R. L. (1990). *Language learning strategies: What every teacher should know*. Boston: Heinle&Heinle.
- zbay, M., & Bahar, M. A. (2012). İleri okur ve stbiliř eđitimi. *Uluslararası Trke Edebiyat Kltr Eđitim Dergisi*, 1(1), 158-177.
- zbay, M. (2007). *zel ođretim yntemleri-II*. Ankara: nc Kitap.
- zbay, M. (2006). *zel ođretim yntemleri-I*. Ankara: nc Kitap.
- zsoy, G. (2007). *İlkđretim beřinci sınıfta stbiliř stratejileri ođretiminin problem özme bařarısına etkisi*. Yayınlanmamıř doktora tezi. Gazi niversitesi Eđitim Bilimleri Enstits, Ankara.
- Saito, Y., Horwitz, E. K., & Garza, T. J. (1999). Foreign language reading anxiety. *The Modern Language Journal*, 83(2), 202-218. <http://dx.doi.org/10.1111/0026-7902.00016>.
- Schraw, G. (1998). Promoting general metacognitive awareness. *Instructional Science*, 26, 113-125.
- Schraw, G., & Moshman, D. (1995). Metacognitive theories. *Educational Psychology Review*, 7, 351-371.
- Sellers, V. D. (2000). Anxiety and reading comprehension in Spanish as a foreign language. *Foreign Language Annals*, 33(5), 512-521. doi:10.1111/j.1944-9720.2000.tb01995
- řen, H. S. (2003). *Biliřotesi stratejilerin ilkđretim okulu besinci sınıf ođrencilerinin okuduđunu anlama dzeylerine etkisi*. Yayınlanmamıř doktora tezi. Gazi niversitesi Eđitim Bilimleri Enstits, Ankara.
- řencan, H. (2005). *Sosyal ve davranıřsal ołmlerde gvenirlik ve geerlilik*. Ankara: Seđkin Yayıncılık.
- Torgesen, J. K. (2000). Individual responses in response to early interventions in reading: the lingering problem of treatment resisters. *Learning Disabilities Research & Practice*, 15, 55-64
- Torgesen, J., Wagner, R., & Rashotte, C. (1994). Longitudinal studies of phonological processing and reading. *Journal of Learning Disabilities*, 27, 276-286.
- Vacca, J. A. L., Vacca, R. T., Gove, M. K., Burkey, L. C., Lenhart, L. C., & McKeon, C. A. (2006). *Reading and learning to read*. Boston: Pearson Education.
- Williams, A. M., Vickers, J., & Rodrigues, S. (2002). The effects of anxiety on visual search, movement kinematics, and performance in table tennis: A test of Eysenck and Calvo's processing efficiency theory. *Journal of Sport and Exercise Psychology*, 24, 438-455.
- Woolfolk, A. (2007). *Educational psychology*. Boston: Pearson.
- Young, D. J. (1991). Creating a low-anxiety classroom environment: What does the language anxiety research suggest?. *Modern Language Journal*, 75, 425-439.
- Zin, M. Z., & Rafik-Galea, S. (2010). Anxiety and academic reading performance among Malay ESL learners. *Journal of Pan-Pacific Association of Applied Linguistics*, 14(2), 41-58.