



**T.C.  
YEDİTEPE UNIVERSITY  
INSTITUTE OF EDUCATIONAL SCIENCES  
PROGRAM OF GUIDANCE AND PSYCHOLOGICAL COUNSELING**

**Master's Thesis**

**THE IMPACTS OF IRRATIONAL BELIEFS AND PERCEIVED PARENTING  
ATTITUDES ON THE TEST ANXIETY LEVELS OF HIGH SCHOOL STUDENTS**

**By**

**Onur GÜMÜŞKAYNAK**

**2019**



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YEDİTEPE UNIVERSITY  
INSTITUTE OF EDUCATIONAL SCIENCES DIRECTORATE

THESIS SUBMISSION and APPROVAL FORM

SUBJECT: The Impact of Irrational Beliefs and Perceived Parenting Attitudes on the Test Anxiety Levels of High School Students

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Figure1. Cognitive-Attentional Model of Test Anxiety (Saranson, 1980a)**Error! Bookmark not defined.**



## **ABBREVIATIONS**

**ANOVA:** Analysis of Variance

**Df:** Degrees of freedom

**Sd:** Standart Deviation

**REBT:** Rational Emotive Behavioral Therapy

**REE:** Rational-Emotive Education

**TAI:** Test Anxiety Inventory

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## ÖZET

Bu çalışma, lise öğrencilerinin sınav kaygısı düzeyleri üzerinde akılcı olmayan inançların ve algılanan anne-baba tutumlarının yordayıcı rolünü incelemeyi amaçlamıştır. Bu hedef doğrultusunda ilgili çalışma, yordayıcı korelasyonel araştırma modeli niteliğinde oluşturulmuştur. Demografik Bilgi Formu, Çocuk Yetiştirme Tutumları Ölçeği ve Akılcı Olmayan İnançlar Ölçeği, Süleyman Demirel Mesleki ve Teknik Anadolu Lisesi, Tuğrul Bey Anadolu Lisesi ve Piri Reis Mesleki ve Teknik Anadolu Lisesinde okuyan 341 lise öğrencisiyle gerçekleştirilmiştir.

Korelasyon bulgularına göre, algılanan anne-baba tutumları ile sınav kaygısının anlamlı ilişkili olduğu, ilgi/sevgi alt boyutlarının negatif; sıkı denetim/kontrol alt boyutları pozitif yönlü ilişkili saptanmıştır. Ayrıca, akılcı olmayan inançlar ile sınav kaygısı alt boyutları ve toplam puanları pozitif yönlü ve anlamlı ilişkilidir. Regresyon bulgularına göre, sınav kaygısı kuruntu alt boyutu ve toplam puanları anne tarafından ilgi/sevgi alt boyutu tarafından negatif yönlü; akılcı olmayan inançlar tarafından pozitif ve anlamlı düzeyde yordanmaktadır.

Demografik değişkenlere ilişkin bulgular incelendiğinde, cinsiyete göre sınav kaygısı alt boyutlarının ve toplam puanlarının farklılığı anlamlıdır. Erkek öğrencilerin sınav kaygısı puanlarının kız öğrencilerine göre daha yüksek olduğu görülmüştür. Lise türüne göre sınav kaygısı endişe alt boyutu puanlarının farklılığı istatistiksel olarak anlamlıdır. Meslek lisesi öğrencilerinin sınav kaygısı endişe alt boyutu puan ortalamalarının daha yüksek olduğu görülmüştür. Ayrıca, sınıf ve yaş değişkenine göre anne tarafından ilgi/sevgi tutumu puanlarının farklılığı istatistiksel olarak anlamlıdır. Lise birinci sınıf ve 15 yaşında olan öğrencilerin anne tarafından algılanan ilgi/sevgi alt boyutu puanlarının daha yüksek olduğu bulunmuştur. Ayrıca, lise birinci sınıf öğrencilerinde sınav kaygısı endişe alt boyutu puanları daha yüksektir. Anne eğitim düzeyine göre sınav kaygısı alt boyutları ve toplam puanlarının farklılığı istatistiksel olarak anlamlıdır. Anneleri üniversite mezunu olan öğrencilerin sınav kaygısı alt boyutları ve toplam puanlarının daha yüksek olduğu saptanmıştır. Ortaokul mezunu annelerde baba tarafından algılanan Katı Kontrol ve Süpervizyon alt boyutu puanlarının daha yüksek olduğu saptanmıştır.

Arařtırmada elde edilen bulgular, ğrencilerin algılanan ebeveyn tutumları ve akılcı olmayan inançlarının sınav kaygısı düzeylerini açıklayan faktörler olduğunu göstermektedir.

Sınav kaygısına ilişkin yapılacak önleyici ya da koruyucu müdahalelerin yapılandırılmasında söz konusu etken unsurların değerlendirilmesi ve ileri çalışmalarla desteklenmesi gerekliliğı düşünülmektedir.

**Anahtar Kelimeler:** Akılcı Olmayan İnançlar, Anne-Baba Tutumları, Sınav Kaygısı, lise öğrencileri

## **ABSTRACT**

The aim of this study was to investigate the predictive role of irrational beliefs and perceived parental attitudes of high school students on test anxiety levels. In line with this objective, the related study was formed as a predictive correlational research model. Demographic Information Form, Child Rearing Attitudes Scale and Irrational Beliefs Scale were applied to 341 high school students studying in Suleyman Demirel Vocational and Technical Anatolian High School, Tugrul Bey Anatolian High School and Piri Reis Vocational and Technical Anatolian High School.

According to the correlation findings, the perceived parental attitudes and the anxiety of the exam were significantly correlated with the negative of the sub-dimensions of acceptance / involvement; The strict control / supervision control sub-dimensions were determined to be positively correlated. In addition, irrational beliefs and test anxiety sub-dimensions and total scores were positively and significantly related. According to the regression findings, the test anxiety covert sub-dimension and total scores were negative by the mother's acceptance / involvement sub-dimension; it is predicted positively and significantly by irrational beliefs.

When the findings related to demographic variables are examined, the difference of test anxiety sub-dimensions and total scores according to gender is significant. It was observed that the test scores of the male students were higher than the female students. The difference of test anxiety subscale scores according to high school type is statistically significant. It was seen that the mean score of the anxiety of the vocational high school students was higher. In addition, the difference between the points of acceptance/ involvement affection attitude by the mother according to the class and age variable is statistically significant. High school first grade and 15 year old students were found to have higher acceptance / involvement perceived by the mother sub-dimension scores. In addition, the concern of test anxiety in high school freshman students is higher than the scores in the sub-dimensions and total test anxiety scores. The difference of test anxiety sub-dimensions and total scores according to mother education level was found as statistically significant. It was found that the test anxiety sub-dimensions and test anxiety total scores of the students whose mothers were university graduates were higher. It was found that the scores of the

Strict Control and Supervision sub-dimension perceived by the father were higher in the mothers of secondary school graduates.

The findings of the study show that the perceived parental attitudes and irrational beliefs of the students are the factors that explain the test anxiety levels. In constructing preventive or protective interventions related to test anxiety, it is considered that these factors should be evaluated and supported by further studies.

**Key Words:** Irrational Beliefs, Parental Attitudes, Test Anxiety, high school students

# 1. INTRODUCTION

## *1.1 Research Problem*

As a result of rapid changes in social, socioeconomic and political fields, the importance given to higher education is increasing. Young people and their families perceive university education as the only option of a successful life. However, university entrance exams may cause great pressure on young people and their families. Adolescents, who are in the most turbulent, perhaps the most critical phase of life can react to challenging exam conditions with different levels of anxiety (Doğan, 1999). It is known that the anxiety is preventing the students from realizing their potential and from time to time they cause them to abandon even their educational lives, and it affects their future goals and vocational decisions negatively and this maladjustment state appears in their school context (Adana & Kaya, 2005; Erözkan, 2004). Therefore, it is important to try to understand the emotions of adolescents about the exams.

In general terms, anxiety has two aspects: the first is related to delusion and the second reflects the cognitive aspect of anxiety. The first aspect is related to the negative thoughts, evaluations and internal conversations of the person about his failure, and incompetence in general. The second aspect is the stimulation of the autonomic nervous system. This aspect is associated with the cognitive aspect of anxiety (Liebert & Morris, 1970). The level of anxiety associated with decreasing pre-test anxiety is more related to cognitive dimension (Hembree 1988). According to Young (2003), early maladaptive schemas are defined as lifelong invalid beliefs for one's self and their relationships, including memories, emotions, cognitions and bodily sensations. Schemas generally reflect the family environment / immediate environment in which the child is living, developing during childhood or adolescence. These schemas are unconditional, rigid, and resistant to change and may become disturbing in later life, and may cause different negative emotions and psychological problems when activated by various life events.

In recent years, adolescents, who are constantly changing and developing social values in society, can be worried about being successful in educational life, gaining economic independence, getting approval of society and environment, developing healthy peer relations and developing a healthy personality. In addition to the pleasure of loneliness, the longing for

joining a social group, contempt for an adult but being endured with him or her, anxiety (anxiety) and enthusiasm for the future despite despair can be counted among the marked contradictory feelings of adolescence (Yavuzer, 1999). During the adolescence, the one who passed their exams affecting the education process such as the transition exam to the high school and the university entrance exam, is experiencing a high level of test anxiety in the process. Test anxiety is a special kind of anxiety and a feeling of uneasiness which is mixed with fear when it comes to the evaluation of the individual (Erözkan, 2004: 15). One of the factors that cause anxiety in adolescents is the attitudes of parents towards them (Yavuzer, 2001). These behaviors and attitudes of parents affect the emotional and social development of adolescents (Yavuzer, 2001). The first person he / she interacts when he / she is born is the family members who provide self-care, and is especially their parents. This interaction continues throughout the life of the child. Parental influence has an important place and value in terms of forming the child's personality structure (Yörükoğlu, 1989).

Parents' attitudes are of great importance in the formation of the personality of the child and in the formation of the character. Parental attitudes affect the child's personality formation as it will serve as a model for the developing child. Similar attitudes and behaviors child has due to the fact that he considers his mother and father as identification models shows how his personality is shaped by his parents. In a harmonious and free family environment, the child, who are raised with his healthy and consistent relationship with his parents can reach adult life as an autonomous individual (Yavuzer, 2009). Parents are the closest figures with their children compassionately and intimately. Therefore, child adopts his cultural values, basic habits and approaches towards his developmental tasks in this parental relationship. The feedback that the child receives during the interaction with his parents plays a very important role in gaining a sense of competence in creating a positive self design (Akkaya, 2008).

Most of adolescents need a great deal of time in stability and structuring of their lives. However, because they do not consider the long-term consequences of their behaviors, they may need guidance and discipline. Therefore, the need for parents' interest and closeness is very high in order to be able to effectively deal with potential problems (Altuğ, 2004). When parents' attitudes are healthy and functional, their children are most likely peaceful, balanced and respectful to each other. This environment; raising their children with overprotective attitudes as well as with lower awareness and education, dysfunctional family relations, and low level of family income may bring negative consequences for the children in the family.



The maternal-paternal attitudes that affect the adolescent are intensely affecting the development of the adolescent, while the repeated pressures and repeated parenting behaviors confront the adolescent with a state of extinction. The adolescent who is tired of under an excessive test load is either overwhelmed by the attitudes of his / her parents and easily separates from this exhausting process.

When examining the studies in Turkey, different researches reveal similar findings about parental attitudes and current psychological states of students. For example, parents' attitudes, which are seen as a cause of test anxiety in students, were revealed in the study of Yavuzer (1999). Yavuzer (1999) stated that there are positive relationships between the supportive and tolerant attitudes of parents towards their children and healthy psycho-social development. Kuzgun (1972), conducted a study with university students related to whether their parents' attitudes were related to students' self-esteem levels. Based on the results, The self-esteem levels of those having irrelevant, rigid, and incomprehensible families are low. It was also concluded that the level of self-esteem of the individuals who grow in democratic families where love, understanding and acceptance were reported was found as high. It was determined that an indifferent, strict, rigid, and authoritarian family environment was found as an variable affecting individuals' self-esteem., Also, individuals living in a harmonious, compassionate and loving democratic family environment can be considered as an effective environmental conditions for a health self-esteem levels. With the results, some parents have a positive effect on their children's attitudes and behaviors towards them.

Considering the exams that are mainly matter of life and death as well as comparing with their peers in terms of exam performance, that the exams are the matters of life and death, and comparing themselves with their peers, the children may be more vulnerabl to have test anxiety. In this case, the young, not just for the exam itself; he thinks that he should enter for his parents and those in the environment, and this raises the anxiety of the test (Abalı, 2006).

When the literature is examined, it is seen that there are many researches about adolescents' test anxiety and this issue is still up to date. Sahin, Gunay, and Batı (2006) conducted a study on high school students that the students' test anxiety is very high and the anxiety began to increase before the exam.

In addition to the research findings related to the reasons of test anxiety and its effects on students, psychological counseling approaches play an important role in explaining the factors

that cause anxiety. One of the most prominent of these approaches is Rational Emotional Behavioral Therapy (REBT), developed by Albert Ellis (Corey, 2008). According to this therapy model, when people come to the world and begin to notice the environment, they develop a number of opinions and thoughts about the world. According to Ellis (1984), these views and thoughts develop in the form of rational and irrational beliefs. While rational beliefs are opinions and thoughts that help people to achieve their very important basic goals such as survival, pain, and rationally happy; irrational beliefs can be defined as destructive views and ideas that prevent people from reaching their basic goals. Ellis stated one of the irrational beliefs as “if I perceive something as dangerous or frightening, I should be preoccupied with the idea and feel the anxiety”. Findings showing the relationship between irrational beliefs and anxiety have been obtained in various studies conducted in our country and abroad.

### *1.2 The purpose of the research*

The main purpose of this study is to investigate the predictive values of irrational beliefs and perceived parental attitudes on high school students' test anxiety levels. In addition, whether or not the test anxiety levels of high school students differ in terms of gender, class level, type of school, and educational status of parents will be examined. For this purpose, the following sub-objectives will be tested:

- Is there a significant relationship between high school students' test anxiety levels and irrational beliefs?
- Is there a significant relationship between high school students' test anxiety levels and perceived parental attitudes?
- Are the high school students' anxiety levels predicted by their irrational beliefs, and perceived parental attitudes?
- Are the test anxiety levels of high school students significantly different in terms of gender?
- Are the test anxiety levels of high school students significantly different in terms of the grade level?
- Do the test anxiety levels of high school students significantly differ in terms of school type?

- Do the test anxiety levels of high school students differ in terms of mothers' educational level?

- Are the test anxiety levels of high school students significantly different in terms of fathers' educational level?

### *1.3 Concepts and Terms*

#### *1.3.1. Test Anxiety*

Test anxiety; is a state of emotion which has a cognitive, behavioral and affective characteristics and creates stress in the individual. (Spielberger, 1972).

#### *1.3.2. Irrational Beliefs*

It is the solid and dogmatic beliefs that lead to unhealthy negative emotions that mislead them to prevent people from reaching their basic beliefs in their lives (Dryden & Mytton, 1999; Cormier & Hackney, 2008; Diguseppe, 1996; Dryden & Neenan, 2004; Ellis, 1984).

#### *1.3.3. Child Rearing (Parental) Attitudes*

Child rearing styles or parents' attitudes they have when raising children. While the concept of attitude is a permanent judgmental tendency that leads people to think, feel or behave in a positive or negative way towards a particular person, group, object or event, parental attitudes are positive or negative judgment tendencies of parents towards their children (Sezer, 2010). Mothers and fathers raising their children, so far; parental control patterns (Baumrind, 1966), child rearing styles (Sümer and Güngör, 1999), parenting attitudes (Maccoby and Martin, 1983), parental attitudes (Kuzgun, 1972), parenting forms (Young, 1999) different names.

## **2. THEORETICAL APPROACHES AND RELATED STUDIES**

### *2.1 Test Anxiety*

Anxiety is the reaction of man to his / her environmental impact and psychological events according to his / her emotional state (Öner & Le Compte, 1985). As stated in the second definition, anxiety is expressed as a condition that prevents the individual at three levels. These are the differences in physiological, thought and behavior levels. Physiological level; heart palpitations, sweating, vomiting, shortness of breath, swallowing, contraction in the stomach, stuttering, headache. From this point on, the circuit enters the sympathetic nervous system. At the point of thought, panic appears and thoughts, dreams and delusions are revealed. Test anxiety which becomes an uncomfortable situation mixed with fear in the academic or learning conditions where the individual is evaluated is a special kind of anxiety (Spielberger, 1972). Test anxiety is an intense anxiety that affects the productivity of the individual as a result of many psychological and physiological differences during the examination starting from the pre-exam. The most common anxiety in adolescents and children is the anxiety of the test (Yavuz & Akagündüz, 2004). Because the exam is an experience that creates anxiety for the individual.

The effect of anxiety on learning and behavior in two different ways can be mentioned. There are preventive and motivating effects of anxiety. Anxiety is a power source that provides efficiency and motivation for new behaviors. Individuals with low levels of anxiety are more difficult to treat simple behaviors than individuals with high levels of anxiety (Kısa, 1996). It is known that the most important motivation resource for the success of the individual in any field is anxiety. The point here is not to eliminate the anxiety that an individual experiences, but to be able to control the anxiety she has experienced and to keep her at a certain level and make her to be a source of motivation to benefit the individual. If we define a controllable anxiety as a normal level of anxiety, this concern will benefit the individual in achieving their goals. For example, the normal level of anxiety a student will experience in the classroom will be a source of motivation for the student to better prepare and present the presentation. On the contrary, the high anxiety experienced by an individual with a high anxiety level will decrease the efficiency during the examination and cause distortion. Test anxiety causes students to discontinue their academic life, make it difficult for them to plan their future lives and make it difficult for them to make appropriate professional

choices. As the anxiety level of students who have high anxiety level prevents them to present their cognitive processes more efficiently, they prefer to have lower status, less competition and avoid possible evaluation (Ergene, 1994).

Test anxiety emerges as an emotional problem from very young ages. Due to the strictly supervised parental attitudes of the children, teachers who criticize critics, strict disciplined school management, punishments, scarce grading and the conditions of passing the class, the students are worried about the test. The test anxiety arises in the person because of the cold and frustrating criticism of adults, the recurrent academic failure, and the similar threat posed by the individual to the existing self in similar situations (Öner, 1990).

### *2.1.1. Theoretical Approaches Regarding Test Anxiety*

As a result of the studies conducted, different theoretical models and perspectives have been introduced to the literature. The different theoretical perspectives of exam anxiety-related factors, triggers and their results are structured on two basic perspectives (Mandler and Saranson, 1952): drive-oriented (Mandler and Saranson, 1952), which includes cognitive, carefully related formulations and skills deficiency Arousal perspectives with perspectives (Wine, 1971) are defined as the components that constitute the theoretical framework of test anxiety.

#### **Drive models:**

It is suggested that excessive excitability and motivation in learning and evaluating certain subjects affect performance in the tasks involving complex performance in addressing test anxiety in the impulse perspective. It is known that different models of motivation for this view are included in the literature and most commonly based on the model proposed by Mandler and Saranson (1952). In addition, it is known that alternative drive models for test anxiety were found in experimental studies examining the relationship between anxiety and learning, especially in the 1960s (Spence and Spence, 1966). Nowadays, although the number of studies in which the anxiety of the exam is discussed within the framework of the drive model, this model is stated to offer an important point of view in understanding the mechanisms related to the state of excitability, which affects the performance of individuals (Spielberger, 1966).

The drive model formulated by Spence and Spence (1966) is an approach based on Hull's Theory of Learning, which includes, in certain cases, the assessment of possible

responses to learning. In general, the concept of drive is a concept that refers to individuals' levels of motivation for a specific time period. The drive is a universal movement but a determining factor in the motivation of individuals. Another important concept is known as the habit strength and is defined as the tendency of individuals to react to a particular stimulus. The habit strength includes the attitudes of individuals in the past to a particular response. At the same time, the ability of individuals to respond correctly is related to habit power. The stimulating potential is defined as the likelihood of a specific response or response.

The drive theory provides some basic assumptions about the learning process. First, learning is a situation in which correct or erroneous responses may arise, a new task. Incorrect answers can be seen in people, even though the correct answers have been learned. Second, the ability to respond correctly and to stand against incorrect responses is determined by the level of motivation. Third, performance is a condition that can be shaped by the power of people to respond correctly and to eliminate errors. Mathematically, the drive model is expressed as the emergence of the stimulus potential shaped by the power of the response or response, the state of motivation and the function of habit (Spence and Spence, 1966).

In the Spence-Hull version of the drive model, anxiety is defined as the level of stimulation of individuals. It is suggested that individuals may not only give automatic and correct answers in the direction of their impulses, but also have non-task-related reactions. Spence (1958) stated that the anxious individuals were emotionally responsive and suggested that they gave stronger responses especially against stress or negative stimuli. In this respect, it was stated that test anxiety may be a form of reaction and expression which is an extension of general anxiety in individuals (Spence, 1958). In addition, it has been suggested that because the level of anxiety increases the general impulse level in individuals, there is an emotional state which increases the stimulation against all possible responses and this situation increases the error. The increase in drive is characterized as a force that leads to an increase in the tendency towards both right and wrong answers.

Although it is known that the drive model in exam anxiety has important and unique contributions in understanding the mechanisms behind the test anxiety, it has been suggested that it is limited in terms of examining the anxiety and responsiveness of individuals in especially easy tasks (Tobias, 1985).

**Deficit models:**

In the framework of the deficient model, it has been suggested that the cause of test anxiety is due to lack of attention and academic skills. In this context, the following models are presented:

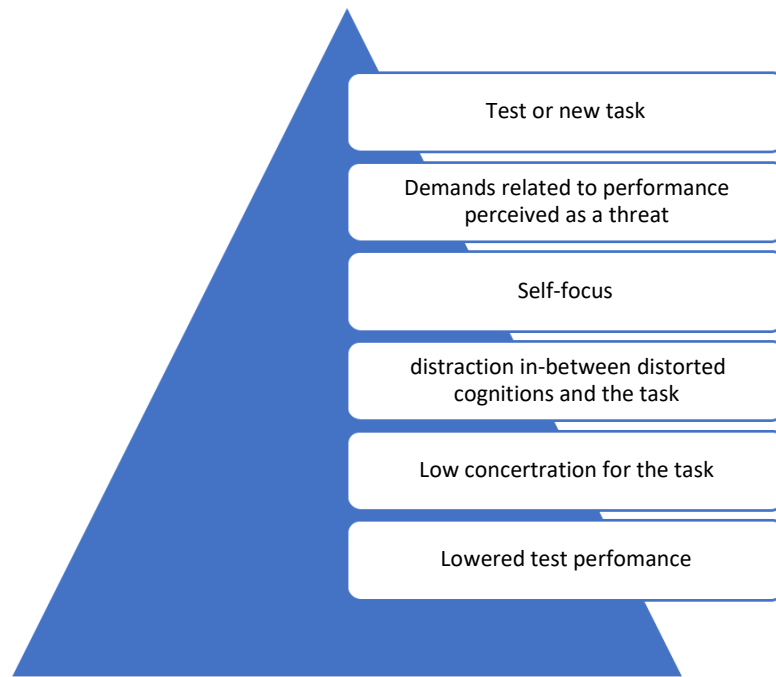
**Cognitive interference model / Cognitive attentional model**

Considering current theories about anxiety, it is observed that the relationship between anxiety and performance depends on cognitive-attention and frustration perspectives (Wine, 1971). In line with the deficiency model, it is stated that the factors determining the performance of low and high level students are attention and focus.

In contrast to the impulse model, instead of considering emotional or physiological responsiveness, it is argued that cognitive structures are decisive in the performance of students with low and high anxiety levels (Wine, 1971). It has been stated that cognitive structures lead to anxiety, cognitive frustration and disruptive thoughts in individuals and this situation makes it difficult to focus, especially when it comes to independent thought (Wine, 1980).

In the context of cognitive-attention theory, it has been stated that there is an effect of frustration in the relationship between anxiety and performance (Mandler and Saranson, 1952). In individuals with high levels of anxiety, self-centering is more common during an examination than focusing on the exam. This leads people to fail to perform their duties or to be unable to focus on the task (Wine, 1971). Saranson (1984) suggested that cognitive inhibition is a mediator function in the relationship between test anxiety and performance deficiencies. It is stated that both situational and individual factors play a role in revealing obstructive thinking and cognitive processes. Because of this thought and cognition, it has been suggested that the dysfunctional cognitive activities of individuals and their level of focus are highly affected and the performance is adversely affected (Saranson et al., 1990).

The cognitive-caution model for exam anxiety is shown in the flow chart in Figure 1:



**Figure1. Cognitive-Attentional Model of Test Anxiety (Saranson, 1980a)**

### **Study skills deficit model**

In the 1980s, a lack of skills model (Naveh-Benjamin, McKeachie, Lin and Holinger, 1981), which emerged as a strong alternative to the cognitive-attentional model, argues that anxiety and failure of the test have arisen due to the lack of skills in the study and examination. According to this model, there is no decrease in performance due to the temporal cognitive inhibition status of the individuals during the examination, and the test failure and test anxiety arise due to the shortcomings related to the learning process. Covington and Omelich (1988), in a study in which the hypothesis proposed in this model was tested, confirmed that academic achievement and test achievement of students with inadequate levels of study were low. Students who are aware of the inadequacy and low self-esteem of students who are aware of the emergence of exam anxiety is stated. It has been stated that anxiety may be a natural condition for individuals with deficiencies in information retention, recall and regulation, and performance concerns may manifest themselves (Covington & Omelich, 1988).



## **TransactionalModels:**

### **Spielberger'sState-TraitAnxiety Model**

Spielberger, who is one of the researchers about test anxiety, investigated the structure of test anxiety and formed the başında State-Trait research model. According to this model, state anxiety is a normal type of anxiety that sometimes manifests itself in each individual and in temporary situations. Continuous anxiety is not a condition observed for each individual and is not considered as a healthy condition. In continuous anxiety, the individual thinks that the values he has developed are threatened and he / she feels anxious for the process, therefore he becomes unhappy and unhappy (Spielberger & Vagg, 1995). Exam anxiety; It is a feeling state that has a cognitive, behavioral and affective characteristics and creates stress in the individual (Spielberger, 1972). Test anxiety consists of two dimensions: cobwebs and emotionality. The delusion is the negative interpretations and thoughts about the individual. In short, the delusion represents the cognitive aspect of test anxiety. During the examination, the person can not overcome the negative thoughts, can not overcome the problems faced by such reasons and causes the process that causes distraction. Affectivity represents the sensory-physical aspect of exam anxiety. In such cases, physical conditions such as rapid heart beat, sweating, sudden fever and cold, flushing, nausea, nervousness, tension are observed (Öner, 1990).

### **TransactionalProcess Model:**

Transactional Process Model, Spielberger and Vagg (1995b), based on an understanding of the origins of test anxiety, based on personal and situational variables, mediator function of emotional and cognitive processes related to responses, short-term results related to test anxiety, and emotion-oriented and cognitive-focused intervention strategies. According to this model, the threatening or positive perception of the perceptions of the students' perceptions of the environment is defined as differences in both individual and situational factors. For example, the student's ability to find certain lessons more easily creates a basis for the perception that he / she can perform better in the exam. If the course includes the subjects that he / she thinks are risky and unsuccessful, the exam anxiety can be seen because of the concern that the performance in the exam will be low.

In the transactional process model, it is stated that the mutual and dynamic interaction of academic skills and attitudes, perceived threats, cognitive processes during and before the examination, the quality of exam performance and the state anxiety level during the examination are the determining factors in the test anxiety (Spielberger & Vagg, 1955a).

## *2.2 Theoretical Approaches Related to Irrational Beliefs*

### *2.2.1 Rational Emotive Behavioral Therapy*

Rational Emotional Behavioral Therapy (REBT) was developed by Ellis in 1955 both as a counseling theory and as a philosophy. REBT, a method for humanist existentialism, is designed to make profound philosophical changes in clients (Weinrach, 2006). Rational Emotional Behavioral Therapy (REBT) is a type of therapy that explores the mutual causality and interaction between people's emotions, thoughts and behaviors (Gençtanırım & Voltan-Acar, 2007). It is possible to see the first traces of the Cognitive Behavioral Approaches in the Alfred Adler, which continues to have an impact on contemporary theories and is regarded as the pioneer of the phenomenological approach. Adler believed that human behavior can be explained by analyzing the individual's own inner life. According to her, the reasons for the emergence of behavior should not be sought in the events surrounding the individual. Behaviors occur as the product of events under the person's own skin behavior. The main determinants of these subjective responses within the human body are the values, attitudes, interests and thoughts of the individual. Therefore, the thoughts that reflect the way the individual is interpreting reality are the main determinants of behavior. In other words, it is important how the individual sees and interprets them rather than the real events in the environment in the formation of behaviors (Gençtan, 1995). The ancient Greek and Roman Stoic thinkers such as Epictetus, Marcus Aurelius, Spinoza, and Bertrand Russell were influenced by their views on the philosophical reasons of psychological disorders. Ellis' opinion on the occurrence of absolute, dogmatic thought in the formation of psychological disorders, first came from Karen Horney's "bullying as a necessity" term (Dobson, 1988). Because Albert Ellis thought he found it different from the rational therapists before him, he named his approach Rational-Emotional. Ellis has a doctorate in psychology and has chosen to work on family, marriage and sexual therapy. He offered his services to those who applied to them, but rather than informing him about matters such as family, marriage and sexual therapy, he began to discover that people who applied to him had been suffering from

emotional and psychological depression. For this reason, Ellis wanted to be more useful to those who applied to him through psychoanalytic training. Ellis has served clients for a while with a psychoanalytic approach. However, in 1962, Ellis began applying REBT on people and claimed that REBT was one of the first popular cognitive behavioral therapies (Spencer, 2005). Although she understood the psychological state of the client, she said that it was meaningless to wait for years to realize herself (Patterson, 1966). The role of the passive counselor in psychoanalysis and the 'free association' sessions of the client, which do not exceed a few words, led to Ellis's adoption of the Neo-Freudian approach and led to a more intense psychotherapy. In this sense, Ellis chose to be more active and guided in therapies. Ellis has adopted a rational approach from this point on. On the basis of his experience, Ellis sees the reason for the development of irrational neurotic ideas in individuals in their knowledge of cognitive distortions and their resistance to new behaviors. Against this situation, Ellis summarizes the purpose of the counseling as to raise awareness of the wrong schemes experienced by the clients and to teach them to produce rational solutions to their questions (Corey, 1991).

According to REBT, people face different events in their daily lives and they gain experience from many stimuli and get comments and inferences from these experiences. Rational Emotional Therapy's approach to human beings is not as pessimistic as the psychoanalytic approach nor as optimistic as the approach approaching the client. However, it is a fact that Rational Emotional Therapy has many things in common with humanistic and existential approaches. Ellis describes human approach as humanistic (Dogan, 1995).

Ellis commented on the humanist approach of the human according to the rational and irrational system of the individual and made inferences. REBT carries out the idea that people exist in nature by trying to survive in order to reach the level of happiness (Egbochuku, Obodo & Obadan, 2008). This rational and irrational system was the basis of REBT. Rational beliefs are not absolutist, they do not distort the facts and they are useful in reaching people's goals. Non-rational beliefs are obscurant, distorting facts, emotionally disturbing people and playing a preventive role (Ellis, 1984a; Türkçapar, 2011) .Ellis (1999); not the cultural transmission, it is a necessity for them, making them unrealistic and absolutist, ie, " must-and-should " they say that they are statements.

Rational Emotional Behavioral Therapy states that people come to the world with both rational and irrational, self-help and self-destructive tendencies (Ellis, 1999). According to Ellis (2000), this duality occurs spontaneously and continues spontaneously if a new way of

learning is not learned (Gladding, 2004). acquire absolutist and unrealistic thoughts by children who do not acquire functional emotion behaviors and skills, who are not approved by their parents and who are not rewarded. In addition, when they are rejected by their parents and other people, children learn about right and wrong. Children who acquire such experiences start to develop irrational beliefs because they think that they will be a bad person as a result of misconduct.

Throughout their lives, people are striving to achieve their goals. The first is sadness, frustration and nervousness, which are called negative emotions. REBT sees this situation as a source of motivation and a motivation for people to reactivate their goals. The second one is that the goals are turned into a rigid necessity, resulting in a person turning to a psychological disorder such as depression and anxiety. From this point on, REBT is engaged and tries to repair such ideas. As a result, the objective of REBT is to help people to become aware of their irrational beliefs transmitted from their families and cultures, and to allow them to think more rationally and to provide more functional ideas (Ellis, 1999).

The basic assumptions of REBT can be summarized as follows (Ellis, 1993; Ellis, 1995):

1. Psychotic and neurotic tendencies are not only congenital. It can be learned later.
2. Rational emotional therapy recognizes that psychopaths, adult psychotics or children with autism have hormonal deficiencies.
3. Creating or maintaining disturbing beliefs is purely humanistic.
4. People can change their behavior or cognitive, affective structure. It can change the pre-existing reactions and attitudes. It can ensure its peace of mind and keep it alive in a peaceful way.
5. The REBT assumes that people do not act on the dysfunctional emotional problems (C), but only on the person (s) of belief (B).

To sum, according to REBT, emotions, thoughts and behaviors in humans occur through interaction with the environment. Because of this situation, each person is responsible for his own thoughts and behaviors. Individuals who are disturbed by behaviors must be willing to change their behavior and make an effort to change (Gençtanırım & Voltan-Acar, 2007).

### *2.2.2 A-B-C Personality Theory*

A-B-C personality theory is the basis of the application and approach of Rational-Emotional Therapy. Rational Emotional Behavior Therapy suggests that irrational beliefs that an individual has on the basis of emotional-psychological disorders take place. This approach is explained by ABC model (Çivitci, 2003). This theory is based on the way the individual perceives the event rather than the event. The purpose of the REBT is to show that the source of its uneasiness comes from irrational thoughts; it is to replace the irrational thoughts with rational thoughts and to give him a rational worldview. This purpose is mainly achieved by explaining ABC theory to the client (Jones, 1982; Doğan, 1995). A represents the existence of an event or attitude outside of the individual or the behavior and attitude of a person. C is an individual's emotion against an event and its reaction to this event. The reaction may not always be appropriate. A (activating event) does not cause C (emotional result). A person's belief about A (B) causes C (emotional reaction). For example, if a person enters an emotional depression after leaving his lover, the reason for such an emotional reaction is not separation alone. Because he cannot maintain a successful relationship, he may have feelings of failure, worthlessness and beliefs about being rejected. According to Ellis, the situation causing emotional distress (C) is not the event of separation (A), but rejection and the belief that the person is failing in the relationship (B). D is the application of therapeutic techniques to provide awareness to clients about their irrational thoughts. In order for a person to get rid of uncomfortable emotions, the best technique is to use empirical, emotional and behavioral techniques. According to Ellis, in order to change the uncomfortable emotions, it is necessary to discover the irrational thoughts in the self-belief system (A) and teach the most suitable way of dealing (Corey, 1991).

The consultant starts the research in C level. Level C is the point where the individual feels restless, anxious, or feels worthless as a result of his / her own experiences. The client applies to the therapist to overcome the feeling of anxiety, restlessness and worthlessness. A is a stimulating event. C is the situation experienced by the counselor. According to the client, he is aware that there is a causal relationship between A and C. For example: “my wife divorced me, so I got depressed.” This is an irrational way of thinking. In this case, everyone who has been abandoned by his wife should be depressed. In this case the person's attitude determines the belief that is the belief that the event has developed against the person's event,

not A. In this way, A is the Activating Event, B is the belief system and C is the Consequence (Corey, 2008).

There are also two types of beliefs, namely IrB (Irrational Beliefs) and rB (Rational Beliefs). For example, someone at point rB might say 'It was too bad that my wife left me. I have to forgive and marry him again, or find someone to recapture happiness and marry again. Tekrar This is a very rational way of thinking about your mind. Because the person is seeking to cope with his life for happiness and he is in an effort to cope with the depressive situation. Here, the rational person will be unhappy in C level. But an irrational person will experience feelings of sadness, regret, disappointment, and denial. The aim at this point is to direct the person who has behaved in accordance with A situation to find the behavior that will lead to happiness. Although he is a broken and sad person in rational thinking, a person who has been single by his wife will correct them between him and his wife and they will seek a new marriage by getting married or getting new friendships. The Rationalist-Emotional therapist aims to show the client his catharsis, and in C he aims to show that the source of the unhappiness he has experienced has brought him to this point by the unintelligible belief system he developed against the not-A incident. From this point, the therapist moves the client to D (Disputing). The aim here is to help the client break down the rational taboos he has created. To break down these taboos starts with rational questions and shaken by the unreasonable taboos developed by the client. For example; The therapist can help raise awareness by asking questions 'why is it worthless because her husband has left me? Neden terap Thanks to the increase in awareness, the counselor can switch to the E (Effect) level due to the conflict with the irrational belief system. The aim of the E stage is to give the person a new vision of life. This will enable the client to develop rB (rational beliefs), gaining his / her environment and gaining an evaluation within the framework of a new view (CE- Cognitive Effect: Cognitive Impact) and the application of information through therapy (BE- Behavioral Effect) (Gladding, 2004).

The Rational Emotional Therapy process is a thought education. Instead of the irrational belief system, which is negative for the person, the rational thoughts are put in place and the person is provided to provide a new world view besides being a happier individual. In this way, in the face of a negative situation experienced counselor learned rational thought will be easier to cope. In this way, the client will be her own therapist. The aim of Rational-Emotional therapy is to provide the client with a tolerant and realistic philosophy of life (Doğan, 1995).

According to many famous personality theorists, the A-B-C personality theory suggested by REBT varies. These can be summarized as follows (Ellis, 1995).

1. Despite the psychoanalysis that the source of emotional disturbances is the libido-related instincts, REBT attaches importance to cognitive distortions. At the same time, REBT opposes this opinion of William Glasser; “all people need to be approved and successful. If this situation is blocked, they cannot catch happiness.” REBT is a desire to be successful and to be approved. If a strong desire is avoided, he argues that emotional discomfort arises.
2. REBT also addresses the Oedipus period in irrational beliefs. He assumes that many sexual problems are caused by irrational beliefs developed by the person himself.
3. The cultural rules and values of society are transferred by the parents and the society of the person. However, people convert these values and social rules into rigid necessities and commands because of their predisposition to irrational beliefs.
4. REBT opposes the unconscious, unconscious, unconscious behavior of people despite the presence of many emotions and thoughts. However, he argues that people can partially do certain behaviors without realizing it.

According to the REBT, hypnosis, dream analysis, free association which are techniques that unconscious suppressed thoughts can be revealed. However, rather than using these time-consuming techniques, these thoughts and feelings can be revealed in a short period of time by evaluating the situations in which the client is experiencing emotional disturbances. In this way, the therapist teaches him how to deal with these irrational beliefs by showing him the hidden emotions of the client (Ellis, 1995; Rosner, 2011).

### *2.2.3 Rational and Irrational Beliefs*

Rational or irrational can be defined as thoughts in the realization of people's goals. While rational thought structures are helpful in achieving their goals, there are irrational thoughts to fail in their goals (Dryden & Mytton, 1999; Ellis, 1984a). Rational thoughts are transparent, logical, and realistic. Even if the individual has negative feelings, they are not obstacles to his goal. Irrational beliefs are not hard and transparent to break down with taboos. It is preventive in realizing its goal. It causes anxiety and depression. It leads to the surrender of a person (Cormier & Hackney, 2008; Digiuseppe, 1996; Dryden & Neenan, 2004; Ellis, 1984b).

Rational beliefs are acceptable, realistic or experimental. However, irrational beliefs are those that cannot be considered experimentally of values or expectations. For example; “I have failed the exam, I'm an incompetent person, and this exam was very important to me.” The idea can be transformed into irrational belief and has no scientific basis. People can naturally turn their goals, desires and desires, that is 'must, and karşı must karşı to life, which they have developed against life (Bernard, 1995).

The nature of REBT aims to bring non-functional, illogical, person-ridden, unwilling, unreasonable thoughts to people, function, who can take a person to his / her goals and provide logical, peace of mind. The most basic structure of realizing this aim is the discovery of irrational beliefs created by the person (Bernard, 1995; Crawford and Ellis, 1989).

According to REBT, irrational beliefs are stated as follows (Crawford & Ellis, 1989):

1. Irrational beliefs, as an individual who wants to achieve happiness, which is one of the main goals of life, causes them to lose negative feelings. For example: “I have to get their approval for my parents to love me. Otherwise, I can't be happy”

2. Irrational beliefs require people to act in accordance with their wishes to group members in the community they want to be. Such behavior results in the exclusion of the person from the social group. For example: “Because you are my beloved, you have to act in line with what I say. Otherwise, I might have to use it hard”

3. Irrational beliefs are in the form of a taboo in the thoughts of a person as rigid and exaggerated. At the same time, it carries imperative requests and directions. For example: “you can't leave me because I love you ”

4. Irrational beliefs do not always overlap with the reality of life. For example: 'I have a bad thing today because I have taken the evil energy of people to me”

5. Irrational beliefs can contain contradictory thoughts. For example: “I am a perfect person, so there is no room in my life wrong “

6. A person with irrational beliefs uses extravagant and over-generalized words as he describes a memory or experience that he / she has negative experiences and cannot be questioned.

In 1962, Ellis found 11 irrational beliefs. He states that the basic irrational belief is. These are (Spencer, 2005):



1. The person has achieved a certain status in his / her society and expects to be approved and loved by important people.
2. If the person considers him talented, successful and adequate, he considers himself valuable.
3. If a person is betrayed or bad, they must be punished and feel guilty.
4. If the situation is not in the expectation of the person wants to know is a disaster.
5. The source of unhappiness for the individual is due to environmental factors.  
Checking this is due to the inadequacy of the person.
6. It should always keep in mind the uneasy and frightening situations for the person, and should always keep in mind the possibility.
7. Avoiding the challenges or the difficulties of life is easier than fighting.
8. A person should have more powerful personalities that he / she can trust or depend on.
9. Similar to those of similar behaviors, similar effects will continue for ever since experiences of the person in his past life now affect his behavior.
10. The person should be upset in difficult situations.
11. A person can always overcome problems with perfect and precise truths. If these problems cannot be overcome, the result will be disastrous.

Ellis re-defined these irrational beliefs and constituted the four main headings of the irrational cognitive process (Szentagotai & Kalay, 2006).

#### 1) Demandingness:

Demanding is a way of thinking which is expressed as the basis of irrational beliefs that have necessity ideas in the molds. For example: I must win the exam.

#### 2) Awfulizing

The catastrophizing; it is a more exaggerated way of seeing a problem. Negative judgment is to make worse inferences than it should be. For example; If I don't win the exam, it's the end of life for me.

#### 3) Low Engagement Intolerance (Low Frustration Tolerance)

Low Prevention Tolerance; it is the case that the person believes will fail when he encounters a problem he thinks cannot cope. For example; I can't pass the exam.

#### 4) Extreme Generalization / Self-Rating (Self Evolution)

Extreme Generalization; This is the case where the person has negative thoughts for himself and his surroundings. The over-generalization of the person is considered to be more of humiliation (grading).

Self Rating; In general, the negative evaluation of people is due to the negative evaluations against him and his environment. For example; I'm stupid and worthless because I failed the exam.

Ellis argues that biological predispositions support irrational beliefs. It has assumed that people can easily accept irrational beliefs that are transmitted from one's environment through their biological predisposition. Ellis listed biological predispositions that lead to irrational beliefs (Ellis, 1975; Ellis, 1984b):

1. All human beings have irrational beliefs, though not all of the basic irrational beliefs.
2. The historical and anthropological research of the societies related to the existence of irrational beliefs and their cultural values, moral structure, and the rules of justice are quite similar, but they are pure, dogmatic, rigid and demanding.
3. Individuals and their surroundings support individuals to leave irrational beliefs but individuals refuse to give up their irrational beliefs. Therefore, people may not be able to get rid of the negative feelings they are trying to cope with the psychotherapeutic processes that they have been going through for many years because of their biological predisposition.
4. Whether people are intellectual or ignorant, healthy or unhealthy, intelligent or mentally deficient is not a determinant factor in their connection to irrational beliefs. Every intelligent, intellectual, healthy person may have mental insufficiency and may be related to irrational beliefs in ignorant or unhealthy people.
5. People's individual or environmentally irrational beliefs lead to negative emotions, but they do not want to abandon these habits. Without the biological predisposition, we would not have seen people want to change the political, religious and social values they learned from the family culture and environment, even though they could change it.
6. It can easily be seen that a high level of intelligence and a talented person can easily shift from one extremism to another. For example; an individual who lives only in the religious aspect can then turn into an extreme extreme atheist state. The reason is that people with high levels of intelligence and talent are able to show a tendency to turn into another unreasonable belief at the other end when they leave irrational beliefs.

7. Someone who has little or no unhealthy emotions as a result of rational beliefs can sometimes be affected by irrational beliefs. A person who is known as a very calm person can commit murder by extreme anger.
8. People can continue to display irrational beliefs even if they know the negative emotions and behaviors caused by irrational beliefs. For example; they continue to drink alcohol even though they know the harm of alcohol.
9. The thoughts and emotions that people have unconsciously resorted to, that is, their automatic thoughts and defense mechanisms, actually show that rational beliefs are biologically susceptible.
10. It is difficult to get rid of these thoughts because rational beliefs are being learned from an early age.
11. People sometimes create irrational beliefs as they gain experience. According to REBT, irrational beliefs are not always learned.
12. Some known irrational beliefs appear to have a logical justification for their explanation, but result in inconsistency.
13. Extreme generalizations create irrational beliefs. For example; One of the teams who watched the match because the team lost: ‘: When I watch the team match, I lose. I won't watch a match or my team won't succeed Bundan iz. It can generalize by transforming non-rational belief in the form.
14. People tend to be more inclined to behave in a way that they will fail as a result of unhealthy thoughts, and behaviors that will have a healthy mind and will be successful. For example; people model alcohol use from their friends, but they often remain indifferent to trying to make their friends quit alcohol.
15. Basic irrational beliefs are the same in almost all cultures. Although there are different irrational beliefs in many cultures, the tendency to get unhealthy thoughts and irrational thoughts is the same.

#### *2.2.4 Appropriate and Inappropriate Thoughts*

Ellis did not consider emotion and thought as two separate situations and considered this to be the most important point of Rational Emotional Therapy. Ellis believed that all realistic goals are not interdependent. Emotions don't exist with their righteousness. One's emotions are as accurate as their accepted values (Altintas and Gultekin, 2003). Therapists encourage clients to develop healthy negative feelings in the face of a problem they cannot

cope with. Afterwards, those who succeed in putting healthy negative emotions instead of unhealthy negative emotions are able to be more happy individuals and motivate them to minimize problems (Dryden, 1994).

**Concern - Anxiety:** The sensible person has the belief that even this failure is a lesson for us. An anxious person is over-stressed, irritable, helpless and pessimistic. Anxious person may feel anxiety occurs if this defeat is a disaster for us.

**Sadness - Depression:** In sadness, there is to accept sadness when faced with a grieving event. For example; It was unfortunate to experience this failure, but there was no reason for it not to be. If a person is depressed, he / she feels very bad. For example; “I have no faith that this failure was a complete disaster.”

**Regret (Guilty):** Regret occurs when a behavior that is not approved in society. For example; “when I was discussing in the classroom, I should have never blasphemy in everyone.” A person who feels guilty feels bad for his behavior. For example; “I should not curse when discussing in class. If I do this, I will be a disaster and become a bad person.”

**Disappointment (Shame):** Frustration occurs when the person around the person performs an unexpected behavior. The person realizes this situation and accepts his / her condition. Shame occurs when the surroundings are labeled as someone who exhibits unexpected behavior. The person blames himself for this situation and always believes that he will be perceived as bad by society and always expects to be accepted by others.

**Annoyance (Anger):** Anger is not caused by people, but by a person's behavior. For example; “I don't like the way he did, but of course I won't break my style.” He has faith. In an angry situation, the person becomes overwhelmed and angry. In this case, he can be aggressive towards others.

### *2.3. Parental Attitudes*

From the moment a baby opened her eyes to the world, her parents had her first communication. This situation continues throughout life. The most important factor in the formation of individuals, personalities is the mother and father (Yörükoğlu, 2007). The relationship between mother, father and child is the basis of the attitudes and behaviors of the child towards other individuals, objects and whole life. Although each culture has its own attitudes and behaviors, the attitudes and behaviors of the parents in the same society differ

when they are raising their children (Kulaksızoğlu, 2004; Yavuzer, 2001). they showed different attitudes (Kulaksizoglu, 2004). While parents were tolerant to a child, it was observed that they were more repressive to the other child, but could have been rejecting the other child while supporting a child. Different child rearing styles of parents show that children in the same family have different attitudes and behaviors (Çağdaş & Seçer, 2005). The child rearing styles differ between cultures or societies and may also vary among families in the same society. It can be mentioned that a society has different reward and punishment methods or different child rearing styles (Kulaksızoğlu, 2004; Yavuzer, 2001).

In addition to the physical needs such as nutrition, shelter and protection, parents' love, care and compassion that they provide to their children provides them to use their confidence and abilities efficiently. The most influential factor in the formation of personality is the positive and negative experiences experienced in childhood. Therefore, mother, father and child experiences in childhood are very important. In addition to the healthy attitudes and behaviors of the parents while raising the child, a child's living as a person in accordance with social norms also determines in the communication established by the parents (Çağdaş & Seçer, 2005). is important. The parental attitude affects the personality formation of the child as it will be a model model for the developing child and demonstrates the similar attitudes that they have acquired from identification models. In a harmonious and free family environment, the child, who grows in consistent and healthy relationships, can reach adult life as an autonomous individual (Yavuzer, 2009).

### *2.3.1. Theoretical Approaches of Parental Attitudes*

#### **Psychodynamic Model**

According to the Adlerci approach, parents should develop their relationships with their children in the framework of respect and cooperation. In addition, it is emphasized in this approach that parents should create a sense of self-perception and responsibility in their social relationships (Hitz & Driscoll, 1989). Children who are encouraged to acquire new behaviors are in cooperation with their parents, while others are making an effort to defeat them. Sherman and Dinkmeyer (1987), one of the Adlerian researchers, stated that encouraging was the most important way to achieve behavioral change. According to the

Adlerci approach, encouraging attitudes of the parents are particularly encouraged to encourage the child to develop, to appreciate behavioral change, and to be in accepting attitude (McKay, 1976).

### **Baumrind's Model**

Baumrind (1966), one of the leading theorists about parenting attitudes of parents, explained the attitudes and behaviors of parents under three basic child rearing styles, which includes different levels of parental control. These are: permissive, democratic (authoritative) and authoritarian (authoritarian) style.

*Allowing / permissive parents* are the constructive and accepting parents against the wishes of the children. The family consults the children in the decisions to be taken and they are transparent about it. They do not give responsibility to their children about family life. Such parents do not try to play an effective role in their children or to change children's behavior.

*Authoritarian parents*, Authoritarian parents, conditionally demonstrate the behaviors they wish to fulfill as children. Desired behaviors should be appropriate rules for traditions and determined authoritarian behavior. Communication between authoritarian parents and children is at the maximum limit since it is appropriate for the dogmatic thinking style. Parents want their children to fulfill their desires. If the desired behavior is not fulfilled, children are punished (Kuzgun, 1972).

*Democratic parents* direct their children's behavior in a logical and problem-oriented manner. If rules are determined by family members, these rules can be discussed in the family. Children are left free within the limits set by their parents. In addition, planning of the future by considering the interests and abilities of children. Children are expected to face the result of their behavior. Parents and their children show affection and affection (Guler, 2012)

Baumrind's triple classification of children on the basis of the style of responsiveness and demandingness (demandingness) have stated that determines. Parents who have democratic attitudes are the parents who can balance the sensibility and demandingness in line with the child's developmental level and needs. Parents who adopt an authoritarian attitude are parents who have low sensitivity to demand.

### **Maccoby & Martin's Two Dimensional Perspective Model**

Maccoby and Martin put Baumrind's child-rearing style on two pillars. The permissive / indulgent style is opposed to authoritarian child rearing style and is characterized by low demand and high level of sensitivity. Permissive / neglecting style is against the explanatory / authoritarian style. It is defined by the low levels of both dimensions (Maccoby and Martin, 1983).

The dimensions proposed by Maccoby and Martin (1983) are also based on other researchers in this field. Steinberg et al. (1991; 1994) state that these two basic dimensions reflect the degree of control and limitations that parents and their children have on the child's proximity, acceptance and love. According to them, Maccoby and Martin's (1983) sensitivity dimension corresponds to the acceptance, love and interest of the family, and to the strict control and control of the family. Therefore, the four basic child rearing styles can be produced at the intersection of acceptance / love dimension and strict inspection / control dimensions. According to Steinberg et al. (1991; 1994), authoritarian style is a method of child rearing where strict control and control is high, acceptance and involvement are low. In families with a democratic child-rearing style, a moderate level of supervision is often accompanied by a high level of acceptance / involvement. The most important characteristic of the pampering parents is the high level of love and interest. Such parents are warm and interested in their children, but they have little or no control over them. Permissive / neglecting parents do not form a sufficient level of control over children in the exact opposite of the democratic ones, nor do they show sufficient affinity and love to them (As cited in Sümer and Güngör, 1999).

### **Young's Schema Model**

Early maladaptive schemas, defined as lifelong valid and dysfunctional beliefs of the person including self-memories, emotions, cognitions and body sensations, are life-long valid beliefs attitudes and behaviors (Young et al. 2003). Because it is unquestioned, unconditional and rigid, it can become disruptive in later life, it can become adaptable by experience in various periods of life and it can cause different negative emotions and psychological problems when it is activated with various experiences. Anxiety may include one or more of the feelings of sadness, distress, fear, failure, helplessness, insensitivity, and judgment (Cüceloğlu, 2000: 276). Young et al. (2003) conducted a theoretical grouping of five schemas and 18 early disruptive schemes.

The discontinuity schema field: individuals with schemas that impair the person's way of life in this area usually have a problem of secure attachment to others. The main reason for this situation is; It is observed that the families of the people believe that their needs such as love, acceptance, compassion, and protection will not be met. Areas of impaired autonomy: Autonomy is the ability of the individual to leave his / her family in a healthy way and to be able to act individually in the level of functionality required by his / her age. Individuals with incompatible schemes in this area have difficulties in establishing their own identity in adulthood, establishing their own relationships, identifying personal goals and acquiring the necessary skills to achieve them. Damaged boundary schema field: This area is related to the lack of internal boundaries related to reciprocity and self-discipline. Those with dominant schemes in this area have difficulty in respecting the rights of others, cooperating, stopping, or obeying long-term plans. They have problems in delaying their instant gratification and limiting impulses for future gains. They can be described as selfish, narcissistic, irresponsible or spoiled. Others' orientation schema field is the schema field owned by individuals who spend too much effort in meeting other people's needs rather than their own needs. Underneath this effort lies the need for affirmation and emotional bonding. These individuals avoid responding to others in the same way. When they meet with people, they focus on the reactions of others rather than their own needs, and they often cannot recognize their own preferences and anger. Suppression schema field: Persons with schemas in this area can compromise their internal feelings such as expressing their sincere feelings, resting, establishing close relationships or health, in order to achieve high and rigid standards. If they are not cautious enough, they are generally anxious, pessimistic and alert because they are in the expectation that their life order will be scattered (Young, Klosko, Weishaar, 2003).

## *2.4 Related Studies*

### *2.4.1 Related Studies in Text Anxiety*

#### *2.4.1.1 National Studies Related to Test Anxiety*

Bilgin (2000) conducted a study in order to investigate the relationship between anxiety and self-esteem with 600 from the lower socio-economic level, 831 upper socio-economic level from 12 to 14 years, a total of 1431 high school students Spielberger Anxiety Inventory with the Coopersmith Self-Esteem Inventory was applied. According to the results, a significant relationship was found between self-esteem levels of students and trait anxiety levels. State and trait anxiety levels decreased as individuals' ages increased. In addition, as



the socio-economic levels of individuals increased, state anxiety levels decreased and self-esteem levels increased.

In Beşir's (2016) study, it was aimed to examine the test anxiety of high school students in terms of demographic variables. Participants of the research consisted of 361 students studying Anatolian Imam Hatip High School in Karatay, Konya in the 2015-2016 academic year. In the data collection process of the study, personal information form and lar Test Anxiety Inventory e were used. The results of the research show that there is a meaningful relationship between the sub-scales of test anxiety and gender according to gender. The score scores were higher than the female students. In addition, according to the level of father education, a significant relationship was found in the test anxiety cursed subdimension. According to the level of education of the father according to the level of education at the level of education level of fathers should indicate a high level of anxiety level of mother education level did not find a meaningful relationship to the test anxiety.

#### *2.4.1.2 International Studies Related to Test Anxiety*

Beer (1991), in the schools in the northern part of Kansas, twenty seven gifted students, Depression Inventory for Children, Beck Depression Inventory, General Anxiety and Breskin Stiffness Scale were applied. As a result of the research, it was determined that gifted students were not inclined to depression and did not take part in an uncomfortable situation related to test anxiety and general anxiety. It was seen that gifted students were able to adjust the exam anxiety better than their peers. In general, gifted students have mental flexibility, their ability to think positively and provide emotional flexibility. Gifted children, such as those that reinforce this situation, can react appropriately to be able to make the right choices quickly and accurately.

#### *2.4.2 Related Studies in Irrational Beliefs*

##### *2.4.2.1 National Studies Related to Irrational Beliefs*

Göller (2010) conducted a descriptive study to determine the relationship between the irrational beliefs of adolescents with depression and hopelessness levels and their perceived academic achievement. The study was conducted on 412 high school students in Erzurum province in 2009-2010. The Irrational Beliefs Scale, which was adapted to Turkish by Yurtal in 1999; to determine the levels of depression and hopelessness; Beck Depression and

Hopelessness Scale and Personal Information Form were used to collect information. According to the research findings; It was found that there were significant relationships between the irrational beliefs of adolescents and all other sub-dimensions of IRBQ except depression and hopelessness levels. The most important predictors of the total scores of the IRBQ were BDI and BHS scores, class and gender. The most effective predictor of AQMS scores was BHS scores, followed by grade level and gender. BDI scores and perceived academic achievement predicted two subscale scores. As a result of the research, the irrational beliefs are significantly different among the girls by gender; among the ninth graders by grade level; According to the school type, it is seen that there is no significant difference in the subscales of perfectionism according to the situation of the village or city.

#### *2.4.2.2 International Studies Related to Irrational Beliefs*

In studies conducted abroad on non-rational beliefs, it is seen that the relationship between Rational Emotional Behavioral Therapy (REBT) effectiveness and irrational behavior and psychopathology and performance are examined.

Among the studies conducted, Sælid and Nordahl (2017) examined the efficacy of REBT in high school students' education to improve mental health and general health levels. In this study, the effects of the knowledge and practice provided by the ADE (Rational Emotional Education) on self-esteem, hope, low anxiety and depression, and nonfunctional thoughts were discussed. In a study with 62 students, three REBT sessions were performed in one group of participants and three more placebo sessions were performed in the other group. In the control group, non-functional thinking, self-esteem and levels of hope were not examined. Anxiety and depression symptoms decreased in both REBT and attentional sessions; however, the effect of REBT on the six-month follow-up period was significantly higher than the placebo sessions. In addition, it was found that REBT sessions were associated with the reduction of students' dysfunctional thoughts.

Wood and colleagues (2017) evaluated the performance of individual REBT sessions given to 18-45 year old adult elite archers who were concerned about performance. In this study, it is aimed to put the rational thoughts that will enable the athletes to be able to reach their goals and to have emotional well-being instead of the irrational thoughts that can be associated with performance anxiety. During the sessions and at the end of the long-term, six-month period, it was observed that the rational thinking of the athletes regarding self-efficacy,

perception, control and archery performance was observed. It is suggested that REBT is an effective approach to manage and regulate cognitive processes, behaviors and emotions that have an impact on performance-based success.

Outar et al. (2018) examined the relationship between the use of REBT in adult subjects and the relationship between exercise dependence and rational and irrational beliefs. Individual REBT interviews showed the changes in exercise addiction symptoms, unconditional self-acceptance and irrational beliefs of three athletes. After 45 minutes of individual interviews and 5 homework assignments, it was found that there was a decrease in the level of non-rational beliefs and exercise dependence in individuals after the REBT sessions.

Buschmann et al. (2017) examined 542 psychology undergraduate students during the examination period in which the study examined the predictive of anxiety and depression levels of automatic thoughts and irrational beliefs. According to the results of the variables analyzed by path analysis, it was found that irrational beliefs from irrational beliefs and irrational beliefs related to self-ranking were the exact mediator variables in the relationship between depressive automatic thoughts and test anxiety.

In a study by Caruso et al. (2018), the effect of REBT-based training for pupils and teachers in primary schools was investigated. It has been suggested that ADE can help students to cope more effectively with problems by reducing their reactions to frustration and irrational beliefs. In this study, third grade students and 26 teachers were included in the study. In the education given to the children, it was observed that there was an increase in the rational beliefs regarding self-perception perception compared to the control group.

#### *2.4.3 Related Studies in Parental Attitudes*

##### *2.4.3.1. National Studies Related to Parental Attitudes*

Kayapınar (2006) examined the extent to which the anxiety concerns of the 8th grade primary school students prepared for the Secondary School Student Selection and Placement Exam (OSS) were influenced by certain variables. In the study, a “Personal Information Form” consisting of 27 items and “Test Anxiety Inventory mad which is a Likert type scale consisting of 20 items was used. The related forms were applied to 632 primary school 8th grade students attending 5 classroom in Afyonkarahisar. Research hypotheses were examined with Multiple Comparison Test. As a result of this research, gender, age, parental education

level, attendance time, OSS score / field type, parent profession, monthly income, test area, parental attitude, study program, expectation of success of the family and students, sports A significant relationship was found between the control group of the control group and the control attitude of the parents about the success of the exam.

Yildiz (2007) conducted a study to determine whether high school students' perfectionism characteristics, parental attitudes and genders predicted test anxiety. In this research conducted with 588 high school students; Tokat Science High School in Tokat, Tokat Anatolian High School and Gazi Osman Pasa High School, consisted of 588 high school students and 244 female and 344 male students studying in the first, second and third grades. In this study, Test Anxiety Inventory, Parental Attitude Scale, Multidimensional Perfectionism Scale were used to collect data. Multiple linear regression analysis and univariate variance analysis were used for the analysis of research data. These variables were found to be predictors of the students' exam anxiety.

Bozaslan, Genç and Kaya (2011) investigated the effects of parental attitudes of university students on problem solving skills, social concerns and academic achievement of students. The population of the study consisted of the students who were studying at Harran University in the academic year of 2010-2011 and the students of the Faculty of Education and Faculty of Arts and Sciences were included in the study. Data were obtained by means of questionnaires. In the study; Social Anxiety Scale de was used to determine the level of social anxiety, Problem Solving Inventory was used to determine the problem solving skills, and Personal Information Form prepared by the researcher was used to determine the academic level and attitudes of the parents and students. As a result of the research, it was found that the academic achievement and problem solving skills of the parents who have a democratic attitude were high. At the same time, it was found that students who perceived parental attitudes as democratic have lower social anxiety than those who perceive parents as being irrelevant, protective, authoritarian and inconsistent. In addition, it was found that academic achievement and problem solving skills of the children who perceived inconsistent and irrelevant parental attitudes were low and their social anxiety levels were high.

#### *2.4.3.2. International Studies Related to Parental Attitudes*

According to previous studies, parental attitudes were found to be significantly associated with variables such as academic performance, depression and anxiety. Among the studies conducted by Golding et al. (2019), in the study where mothers have an external locus of control and their abilities towards mathematics and their performance, the students' ability to carry out mathematics and scientific reasoning and their relation with the external locus of control, which indicates that the events occurring as a result of people or other external factors. It is discussed. Data were collected from Avon Boylamsal Mother-Child Study and cohort study was conducted with 13,988 children. The locus of control was measured by Nowicki-Strickland Internal-External Locus of Control Scale. For the children's performance, a 17-item test was conducted in the field of Mathematics and Logic. In addition, mental arithmetic capabilities were evaluated with WISC measurement. As a result of the correlation analysis, it was found that mental arithmetic and scientific reasoning skills of mothers with high external locus of control were significantly lower in their children. Other factors affecting children's performance and ability were smoking and alcohol use during pregnancy, fish oil consumption, breastfeeding, parental attitudes and attitudes and behaviors of parents towards school and students' examinations. The results showed that parental attitudes were related to academic achievement and performance of children; In this respect, it is thought that there may be indirect relation between exam anxiety and academic success.

In a study conducted by Soni and Kumari (2017), a study of the relationship between mathematics achievement of mathematics of the parent and their children's mathematics was studied. 595 students and their parents aged between 10 and 15 were included in the study. "Math Anxiety Scale- Short Form" "Mathematics Anxiety Scale in Elementary Students", "Mathematics Anxiety Rating Scale for Adolescents" and "Attitudes towards Mathematics Scale" in were used to measure the parents' and children's math anxiety. According to the findings of the variables analyzed with the path analysis method, it was found that parents' math anxiety was an indicator of math anxiety, mathematics attitudes and mathematics performance in their children.

In the study conducted by Ringeisen and Raufelder (2015), the relationship between parental support, parental pressure and test anxiety in high school students was examined and differences were examined according to gender in adolescents. In the study, which included 845 German students with a mean age of 15.3, perceived parental support and pressure and test anxiety were evaluated. In order to include gender differences, in the light of the findings of the variables analyzed by the Structural Equation Model, which included multiple groups, a

relationship was found between the perceived pressure from mothers for girls and the anxiety and emotionality of the test anxiety. For male students, it was found that perceived father support and pressure had a positive relationship with anxiety and inhibition dimensions related to test anxiety. The perceived maternal support for both genders was associated with lack of confidence.

Ahmed (2015), in his study examining the anxiety and coping skills of high school students before the exam, argued that parents had a high grade expectation among the factors associated with test anxiety.

In a study by Shadach and Ganor-Miller (2013), the role of parent involvement in exam anxiety was examined. In the study, which was carried out with the participation of 105 male and female university students, the scale was developed as the first stage upon the excessive participation of the parent. In the second stage, the relationship between exam anxiety and parental involvement was examined in 90 students. According to the results, it was found that there was a relationship between the anxiety level of the students and the emotional dimension of the parents with the excessive participation of the parents towards academic achievement and studies, and the excessive participation of the parent predicted the anxiety anxiety significantly.

### **3. METHODOLOGY**

#### *3.1 Research Mode*

This research is a study which is designed as a predictive correlational research design that is one of the correlational survey models, which aims to explain the predictive roles of irrational beliefs and perceived parental attitudes on test anxiety levels of high school students. Correlational research generally aims to find out the existence of relationship among two or more variables and/or its degree (Karasar, 2014). In predictive researches, it aims to

identify the unknown value of the variable based on the known value of the other variable by examining the relations among the variables.

### *3.2 Population and Sample*

The population of the research is the high school students studying in the 2018-2019 academic year in Tuzla, Istanbul. The sample of the study is selected by appropriate sampling method. In appropriate sampling method, researchers often have more bias than other sampling methods. While sampling may be the best and worst option, the probability of participations by the volunteers may not be accurate in this sampling method (Dawson & Trapp, 2001).

### *3.3. Measurement Instruments*

In the study; Demographic Information Form to determine the demographic characteristics of the students, Test Anxiety Inventory to determine the exam anxiety levels, Irrational Belief Scale - Adolescent Form to determine the irrational beliefs and Parental Attitude Scale to determine parental attitudes will be used.

#### *3.1.1 Demographic Information Form*

The form developed by the researcher in order for collecting demographic information (Appendix-1) related to the age, gender, education levels of the students, etc.

#### *3.1.2 Test Anxiety Inventory*

Test Anxiety Inventory (TAI); It is a psychometric scale, which has emerged as a result of a five-year study by Spielberger and a group of doctoral students. A descriptive and confirmatory factor analysis study was conducted in order to determine the construct validity of TAI (Appendix-2) by Öner (1990). As a result of these studies, it has been decided that TAI is composed of two dimensions: Delusion and Sensitivity. There are a total of 20 items in TAI, 12 of which are crafty and 8 items of Affective dimension. The total score of 20 points

of TAI is based on the total test anxiety level, the score obtained from the subscale is the Test Anxiety Level, and the score obtained from the Affectiveness Scale. Test Anxiety Measures the level of Affectiveness. The score is 20-80. Scores can be scored separately from each subscale and a total score can be obtained from all. The higher the score is higher in the test anxiety levels. Its validity was determined by looking at the relationship of TAI with similar scales. The relationship coefficients between the State-Trait Anxiety Inventory and the scores obtained from the subscales of the TAI were determined. Correlations between Pseudostieri subscales of SCI and trait anxiety scores were as follows; The correlations between .45 and .60 and State anxiety scores, respectively; .39 to .70. Reliability coefficients were calculated using the test-retest technique to determine the reliability of TAI. Reliability coefficients ranged from .90 to .70. Cronbach's alpha internal consistency coefficients were calculated to determine the reliability of the items. Internal consistency coefficients ranged from .93 to .94.

### *3.1.3 Irrational Belief Questionnaire-Adolescent Form*

Irrational Belief Scale developed for university students (Appendix-3) Turkish adaptation to high school students was established by Türküm, Balkaya and Karaca (2005). Irrational belief scale (adolescent form) consists of 16 items. The scale is marked according to the five-point rating and scores between 16 and 80 can be taken from the scale. The increase in the scores indicates that the level of irrational belief has increased. The Cronbach alpha internal coefficient of the scale was .70 and the two half-test correlation was .69. Factor analysis findings show that 51.3% of total variance of IBQ-A is explained. Construct validity of the scale was performed by using the Scale of Dysfunctional Attitudes Scale (.47,  $p < .05$ ).

### *3.1.4 Child-Rearing Styles Inventory*

The Child Rearing Styles Inventory (CRSI) is a scale that was developed by Sümer and Güngör (1999) by using the dimensions proposed by Maccoby and Martin and by the studies of Lamborn et al. The scale consists of a total of 24 items which are assumed to measure the original acceptance / involvement and strict control / supervision control dimensions. In this study, this 22-item form was used. For parents, there are 11 items for measuring the size of acceptance / involvement and 11 items for measuring the dimension of strict control / supervision, which are the basis of child-rearing forms on a separately applied



scale. The acceptance / involvement dimension assesses the parents' acceptance, understanding, and the love and attention they show to the child. The control dimension includes parental limiting, monitoring and disciplining the child's behavior (Sümer and Güngör, 1999). The height of the total score taken from each subscale indicates the height of the attitude expressed by that dimension. Information can be obtained at two levels, categorical and dimensions. Acceptance and involvement and strict control / supervision; categorically, those who score above the median in both dimensions are classified as descriptive authoritarian, while those who score below are classified as permissible / neglecting parents. Those who score below the media in the dimension of acceptance / involvement in the strict control / supervision dimension, are permissive / neglectful, those who score higher than the dimension of acceptance / involvement, and those who score above strict control / supervision dimension are classified as authoritarian parents (Sümer and Güngör, 1999).

### *3.3 Procedures*

In order to carry out the study before the implementation, necessary permission letter will be received from the relevant departments of Istanbul Provincial Directorate of National Education. Participants from 1st, 2nd and 3rd grades of each high school will be randomly selected. After that, students will be informed consent documents to be signed by their parents. Students who will then allow their parents to participate in the study will be asked to fill in the scales mentioned in the section on data collection tools. After the research, the scales will be distributed by the researcher in the course hours of 45 minutes. In this period, the researcher and the instructor was asked by the researcher when there are unclear questions about the scale.

### *3.4 Data Analysis*

The data will be collected through the scales applied to the students and the data will be evaluated in computer environment by using SPSS 23.0 package program. First of all, it will be tried to reveal information about sampling by using frequency analysis from students' answers. The next step is to determine the findings of the research objectives. In this direction, Pearson Correlation Analysis and Linear Regression Analysis will be done first after testing the assumptions of normality. In addition, it will be tried to reveal the findings of the research by using Analysis of Variance (ANOVA) with Independent Sample t Test Analysis. The findings will be discussed in the light of literature.

## 4. FINDINGS

In this section, the participants' perceived parental attitudes, irrational beliefs and statistical analysis findings related to test anxiety are included. In this study, firstly, frequency distribution of demographic variables, investigation of differentiation levels of research variables and subscales in terms of demographic variables and correlation and regression findings between variables are included.

### 4.1 Descriptive Statistics

The findings regarding the descriptive statistics of demographic variables are given in Table 1:

**Table 1. Descriptive Statistics of Demographic Information**

Demographic Variables (N=329)		n	%
Gender	Female	195	57,2
	Male	146	42,8
	Total	341	100,0
Age	15	79	24,0
	16	79	24,0
	17	71	21,6
	18	100	30,4
	Total	329	100,0
Grade Level	1	103	30,2
	2	82	24,0
	3	76	22,3
	4	80	23,5
	Total	341	100,0

High School Type	Anatolian Vocational Total	138 203 341	40,5 59,5 100,0
Fathers' Education	Primary School	79	25,8
	Secondary School	57	18,6
	High School	101	33,0
	University	69	22,5
	Total	306	100,0
Mothers' Education	Primary School	94	30,7
	Secondary School	86	28,1
	High School	97	31,7
	University	29	9,5
	Total	306	100,0

In Table 1, 341 people participated in the research according to the descriptive statistics of the demographic variables. 52.7% of the participants were female (n = 195) and 42.8% were male (n = 146). 24% (n = 79) of the 15-year-old age group, 24% (n = 79) of the 16-year-old, 21.6% (n = 71) of the 17-year-old, and 30.4% of the 18-year-old It was found. According to the class variable, high school freshman first year 30.2% (n = 103), high school second year student 24% (n = 82), high school third grade 22.3% (n = 76) and high school fourth grade 23.5% ( n = 80). 40,5% of the participants were high school students (n = 138) and 59,5% were vocational high school students (n = 203).

According to the level of education of the father, a very low number of illiterate, therefore it was not included in the comparison. 25.8% of primary school graduates (n = 79), 18.6% of secondary school graduates (n = 57), 33% of high school (n = 101) and 22,5% of university graduates (n = 69). Similarly, illiterate and literate responses of mothers were not included in the distribution due to the small sizes. The other answers were 30.7% of primary school graduates (n = 94), 28.1% of secondary school graduates (n = 86), 31.7% of high school graduates (n = 97) and 9.5% of university ( n = 29).

#### 4.2 Preliminary Analyses

For the test of normality, Kolmogorov-Smirnov test examined the skewness and skewness coefficients of the research variables. Kolmogorov-Smirnow coefficients were not found as significant ( $p > .05$ ). In addition, the skewness and kurtosis coefficients of the research variables are shown in Table 2.

**Table 2. Normality Test of Research Variables**

			Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		p	Skewness	Kurtosis
			Statistic	df	P	Statistic	df			
TAIEmotionality			,096	324	,000	,970	324	,000	,539	-,169
TAIWorry			,102	324	,000	,969	324	,000	,566	,029
TAITotal			,080	324	,000	,973	324	,000	,549	-,066
Acceptance (Mother)	Involvement		,130	324	,000	,920	324	,000	-1,160	1,474
Acceptance (Father)	Involvement		,135	324	,000	,933	324	,000	-,901	,330
Strict Supervision	Control Anne	-	,054	324	,023	,995	324	,335	,120	-,152
Strict Supervision	Control Baba	-	,067	324	,001	,992	324	,062	,204	,099
Irrational Beliefs			,049	324	,056	,995	324	,361	-,111	,000

As seen in Table 2, the baseline and skewness coefficients of the research variables are between +1.5 and -1.5, so it is understood that the data is normally distributed (Tabachnick & Fidell, 2007).

#### 4.3 Correlational Analyses

The relationship between high school students' test anxiety, perceived parental attitudes and irrational beliefs averages were examined with anne Pearson Correlation. The findings of the analysis are given in Table

**Table 3. Pearson Correlation Analysis of High School Students' Test Anxiety, Parental Attitudes and Irrational Beliefs**

	1	2	3	4	5	6	7	8
1. TAIEmotion r	1							
ality Altp								
Boyutu								
N	341							
2. TAIWorrySu r	,794**	1						
bscale								
p	,000							
N	341	341						
3. TAI Total r	,960**	,933**	1					
p	,000	,000						
N	341	341	341					
4. Acceptance r	-,196**	-,234**	-,224**	1				
Involvement( p	,000	,000	,000					
Mother)								
N	339	339	339	339				
5. Acceptance r	-,166**	-,171**	-,177**	,541**	1			
Involvement( p	,002	,002	,001	,000				
Father)								
N	337	337	337	336	337			
6. Strict Controlr	,215**	,222**	,230**	-,295**	-,104	1		
and								
p	,000	,000	,000	,000	,056			
Supervision(								
Mother)	N	339	339	339	336	339		

7. Strict Controlr and Supervision( Father)									
	r	,160**	,201**	,188**	-,086	-,079	,612**	1	
	p	,003	,000	,001	,117	,150	,000		
	N	337	337	337	336	337	336	337	
8. Irrational Beliefs									
	r	,252**	,212**	,247**	,020	,018	,180**	,056	1
	p	,000	,000	,000	,712	,742	,001	,303	
	N	341	341	341	339	337	339	337	341

\*\* . Correlation is significant at 0,01 level

In Table 3, according to the correlation findings of test anxiety, parental attitudes and irrational beliefs,

TAI Worry sub-dimension with TAI Emotionality subdimension( $r = .794$ ;  $p < 0.01$ ), TAI Total ( $r = .960$ ;  $p < 0.01$ ), strict control / supervision from mothers sub-dimension ( $r = .215$ ;  $p < 0.01$ ) The strict control / supervision from fathers sub-dimension ( $r = .160$ ,  $p < 0.01$ ) and irrational beliefs ( $r = .252$ ;  $p < 0.01$ ) were found as significantly and positively correlated. TAI Emotionality with the sub-dimension of acceptance / involvement from mothers ( $r = -.196$ ;  $p < 0.01$ ) and the sub-dimension of acceptance / involvement from fathers ( $r = -.166$ ;  $p < 0.01$ ) were found as significantly and negatively correlated.

TAI Worry sub-dimension with TAI Total ( $r = .933$ ;  $p < 0.01$ ), strict control / supervision as mothers' attitudes sub-dimension ( $r = .222$ ;  $p < 0.01$ ), strict control / supervision from fathers sub-dimension ( $r = .201$ ;  $p < 0.01$ ) and irrational beliefs ( $r = .212$ ,  $p < 0.01$ ) were significantly and positively correlated. TAI total with the sub-dimension of acceptance / involvement from mothers dimension ( $r = -.234$ ;  $p < 0.01$ ) and the sub-dimension of acceptance/ involvement from fathers( $r = -.171$ ;  $p < 0.01$ ) were found as negatively and significantly correlated.

TAI Total with Strict control / control mother sub-dimension ( $r = .230$ ;  $p < 0.01$ ), strict control / supervision sub-dimension ( $r = .188$ ;  $p < 0.01$ ) and irrational beliefs ( $r = .247$ ;  $p < 0.01$ ) were significantly and positively correlated. The sub-dimension of acceptance / involvement ( $r = -.224$ ;  $p < 0.01$ ) and acceptance / involvement as fathers' attitude sub-dimension ( $r = -.177$ ;  $p < 0.01$ ) were found to be negatively and significant.correlated.

Positive correlation was found in Acceptance / involvement from mothers and acceptance / involvement from fathers sub-dimension ( $r = .541$ ;  $p < 0.01$ ). Negative and significant correlation was found in Acceptance / involvement from mothers and strict control / supervision as mothers' attitude sub-dimension ( $r = -.295$ ;  $p < 0.01$ ).

Strict control / supervision with mother sub-dimension strict control / supervision as fathers' attitude sub-dimension ( $r = .612$ ;  $p < 0.01$ ) and irrational beliefs ( $r = .80$ ;  $p < .01$ ) were found to be significantly and positively correlated.

#### 4.4. Findings Related to Multiple Regression Analysis

Multiple Linear Regression analysis was used to measure the predictive anxiety of high school students' perceived parental attitudes and irrational beliefs. The findings of the analysis are shown in Table

**Table 4. Linear Regression Analysis of Worry Sub-dimension of Test Anxiety of Parental Attitudes and Rational Beliefs**

		$R^2 = .131$		$\Delta R^2 = .118$	
Model		B	SH	$\beta$	t
1	(Constant)	10,535	3,010		3,500
	Acceptance Involvement(M other)	-,115	,041	-,181	-2,791
	Acceptance Involvement(F ather)	-,034	,035	-,061	-,997
	Strict Control and Supervision(M other)	,029	,048	,041	,591
					,001
					,006*
					,320
					,555

Strict Control and Supervision(Father)	,091	,042	,143	2,164	,031
Irrational Beliefs	,146	,039	,197	3,743	,000*

a. Independent Variable:TAIWorrySubscale

\*p<0,05

According to the findings of the test anxiety worry sub-dimension, parental attitudes and irrational beliefs, which are correlated in Table 4, the descriptive linear regression analysis findings show that the sub-dimension of acceptance / involvement ( $\beta = -0,18$ ;  $p < 0,05$ ) was found as negative and irrational beliefs was found as positive ( $\beta = 0,19$ ;  $p < 0,01$ ) in terms of explaining the scores of the test anxiety worry sub-dimension. According to the results, high level of acceptance / involvement from mothers sub-dimension scores significantly explained the low level of test anxiety worry subscale scores. In addition, the high scores of irrational behaviors significantly explained the higher scores of test anxiety worry subscale score. Explanatory relationship was significant in 13% of the variance ( $R^2 = ,131$ ;  $\Delta R^2 = ,118$ ).

**Table 5. Linear Regression Analysis of the Emotionality Sub-dimension of the Test Anxiety of Parental Attitudes and Irrational Beliefs Variables**

		$R^2 = ,130$		$\Delta R^2 = ,116$	
Model		B	SH	$\beta$	t p.
1	(Constant)	15,764	3,891		4,052 ,000
	Acceptance Involvement(Father)	-,071	,045	-,100	-1,572 ,117



Strict Control and Supervision(M other)	,065	,064	,073	1,024	,306
Strict Control and Supervision(Fa ther)	,072	,055	,089	1,306	,193
Irrational Beliefs	,219	,050	,234	4,369	,000*

b. Dependent Variable:TAIEmotionalitySubscale

\*p<0,05

In Table 5, the test scores were found to be correlated with the emotionality sub-dimension, parental attitudes, and explanatory linear regression analysis of irrational beliefs. According to the findings, irrational beliefs ( $\beta = 0,23$ ;  $p < 0,01$ ) were positive. explains the size scores. According to the results, the high scores of irrational behaviors and the high scores of exam anxiety emotionality sub-dimension significantly explain the mean scores. Explanatory relationship was significant in 13% of the variance ( $R^2 = ,130$ ;  $\Delta R^2 = ,116$ ).

**Table 6. Linear Regression Analysis that Explains the Total Anxiety of the Test Anxiety of Parental Attitudes and Irrational Beliefs**

		$R^2 = ,142$		$\Delta R^2 = ,129$	
Model		B	SH	$\beta$	t p.
1	(Constant)	25,693	6,463		3,975 ,000
	Acceptance				
	Involvement(M other)	-,214	,089	-,155	-2,412 ,016*

Acceptance					
Involvement(Father)	-,099	,074	-,082	-1,338	,182
Strict Control and Supervision(Mother)	,104	,104	,070	,996	,320
Strict Control and Supervision(Father)	,154	,091	,112	1,702	,090
Irrational Beliefs	,368	,084	,229	4,390	,000*

a. Dependent variable:TAI

Total \*p<0,05

According to the findings of the test anxiety total score, parental attitudes and irrational beliefs, which are correlated in Table 6, descriptive linear regression analysis results, the sub-dimension of acceptance/ involvement ( $\beta = -0,15$ ;  $p < 0,05$ ) was found as negative; irrational beliefs ( $\beta = 0.22$ ;  $p < 0.01$ ) was found as positive in terms of explaining the total scores of test anxiety total scores. According to the results, high level of acceptance/ involvement from mothers sub-dimension scores significantly explains the lower scores of test anxiety. In addition, the higher scores of irrational beliefssignificantly explained higher scores of TAI total scores significantly. The explanatory relationship was significant in 14% of the variance. ( $R^2=,142$ ;  $\Delta R^2=,129$ ).

#### 4.5. Comparison Analysis

**Table 7. Independent Sample t Test Findings of High School Students' Test Anxiety, Parents' Attitudes and Irrational Beliefs Based on Gender**

	Gender	<i>N</i>	$\bar{x}$	<i>Ss</i>	<i>t</i>	<i>p</i>
TAI Emotionality Subscale	Female	195	24,72	6,204	-4,569	,000*
	Male	146	28,07	7,290		
TAI Worry Subscale	Female	195	16,23	5,385	-2,269	,024*
	Male	146	17,55	5,311		
TAI Total	Female	195	40,95	11,054	-3,742	,000*
	Male	146	45,62	11,879		
Acceptance Involvement (Mother)	Female	195	43,28	7,440	,477	,634
	Male	144	42,84	9,608		
Acceptance Involvement (Father)	Female	194	40,42	8,791	,680	,497
	Male	143	39,70	10,571		
Strict Control and Supervision (Mother)	Female	195	32,95	7,773	-,538	,591
	Male	144	33,42	7,905		
Strict Control and Supervision (Father)	Female	194	31,12	8,523	,015	,988
	Male	143	31,10	8,379		
Irrational Beliefs	Female	195	60,17	7,623	-,729	,466
	Male	146	60,75	6,730		

\*p<0,05

In Table 3, according to gender, students' test anxiety, perceived parental attitudes and irrational beliefs were found to be different according to gender. Emotionality ( $t = -4,569$ ;  $p < 0,05$ ), Worry ( $t = -2,269$ ;  $p < 0,05$ ) and test anxiety total score ( $t = -3,742$ ;  $p < 0,05$ ) mean differences are statistically significant. According to the results, it was found that the test anxiety sub-dimensions and total score of the males were higher than the female students.

**Table 8. Independent Sample t Test Findings of High School Students' Test Anxiety, Parents' Attitudes and Irrational Beliefs According to the Type of High School**

<i>Type of High School</i>		<i>N</i>	$\bar{x}$	<i>Ss</i>	<i>t</i>	<i>p</i>
TAI Emotionality Subscale	Anatolian High School	138	26,11	7,017	-,103	,918
	Vocational High School	203	26,19	6,807		
TAI Worry Subscale	Anatolian High School	138	15,72	5,139	-3,083	,002*
	Vocational High School	203	17,53	5,439		
TAI Total Score	Anatolian High School	138	41,83	11,623	-1,474	,141
	Vocational High School	203	43,71	11,602		
Acceptance Involvement (Mother)	Anatolian High School	137	43,68	8,175	1,053	,293
	Vocational High School	202	42,70	8,578		
Acceptance Involvement (Father)	Anatolian High School	137	40,64	9,179	,840	,402
	Vocational High School	200	39,75	9,848		
Strict Control and Supervision (Mother)	Anatolian High School	137	32,64	7,357	-,985	,325

	Vocational High School	202	33,50	8,121		
Strict Control and Supervision (Father)	Anatolian High School	137	30,84	7,095	-,491	,624
	Vocational High School	200	31,30	9,277		
Irrational Beliefs	Anatolian High School	138	59,75	6,575	-1,422	,156
	Vocational High School	203	60,88	7,656		

\*p<0,05

According to the school type, the students' test anxiety, perceived parental attitudes and irrational beliefs according to the independent sample t test results, only the differences in worry sub-dimension ( $t = -3,083$ ;  $p < 0,05$ ) of test anxiety was statistically significant. According to the results, it was found that the average score of the students in vocational high schools was higher than the students in Anatolian high schools.

**Table 9. Analysis of Variance Findings of High School Students' Test Anxiety, Parents' Attitudes and Irrational Beliefs According to Students' Grade Level**

<i>Grade</i>	<i>N</i>	$\bar{x}$	<i>Ss</i>	<i>F</i>	<i>Sd</i>	<i>p</i>	<i>Tukey</i>
TAIEmotionalitySubscale	1	103	27,12	7,240			
	2	82	26,50	7,342	1,481	3/337	,219
	3	76	25,42	6,628			
	4	80	25,26	6,048			

	Total	341	26,16	6,883				
TAIWorrySubscale	1 <sub>a</sub>	103	17,60	5,456				
	2 <sub>b</sub>	82	17,56	5,932	2,957	3/337	,033*	a>d
	3 <sub>c</sub>	76	15,95	5,012				
	4 <sub>d</sub>	80	15,78	4,826				
	Total	341	16,79	5,386				
TAITotalScore	1	103	44,72	12,039				
	2	82	44,06	12,609	2,258	3/337	,082	
	3	76	41,37	11,075				
	4	80	41,04	10,202				
	Total	341	42,95	11,630				
Acceptance	1 <sub>a</sub>	102	45,34	7,049				
Involvement(Mother)	2 <sub>b</sub>	81	42,89	8,257	4,272	3/335	,006*	a>c
	3 <sub>c</sub>	76	41,03	9,030				
	4 <sub>d</sub>	80	42,40	9,060				
	Total	339	43,09	8,419				
Acceptance	1	102	41,75	9,079				
Involvement(Father)	2	80	39,45	8,937	2,391	3/333	,203	
	3	76	38,07	10,243				
	4	79	40,63	9,918				
	Total	337	40,11	9,578				
Strict Control and	1	102	34,23	7,023				
Supervision(Mother)	2	81	33,57	7,624	1,544	3/335	,114	

		3	76	32,58	8,052			
		4	80	31,90	8,641			
		Total	339	33,15	7,821			
Strict Control and Supervision(Father)		1	102	32,74	7,771			
		2	80	30,81	8,079	2,001	3/333	,157
		3	76	30,57	9,598			
		4	79	29,85	8,321			
		Total	337	31,11	8,450			
Irrational Beliefs		1	103	59,33	6,960			
		2	82	60,18	7,865	1,747	3/337	
		3	76	61,75	7,523			
		4	80	60,81	6,561			
		Total	341	60,42	7,250			

\*p<0,05

According to the class variable, students' test anxiety, perceived parental attitudes and irrational beliefs variables were found as one-way analysis of variance, worry Subscale [F (3/337) = 2,957; p <0,05] and subscale of acceptance / involvement by the mothers [F (3/337) = 4,272; p <0.05] is statistically significant. According to the Post hoc Tukey analysis conducted to examine the differences in average scores of the students, the first-grade high school students' worry subscale scores were found as the highest. The lowest of those who attend the fourth grade of high school. Also, the acceptance/involvement from mothers subscale was found as significantly lower in high school fourth grade students.

**Table 10. Analysis of Variance Findings of High School Students' Test Anxiety, Parents' Attitudes and Irrational Beliefs According to Students' Age**

<i>Age</i>	<i>N</i>	$\bar{x}$	<i>Ss</i>	<i>F</i>	<i>Sd</i>	<i>p</i>	<i>Tukey</i>
TAI Emotionality Subscale	15	79	26,97	7,743			

	16	79	27,19	6,674	1,729	3/325	,161	
	17	71	25,90	6,791				
	18	100	25,15	6,126				
	Total	329	26,24	6,837				
TAIWorrySubscale	15	79	17,20	5,680				
	16	79	18,00	5,538	2,411	3/325	,067	
	17	71	16,34	4,980				
	18	100	15,99	5,173				
	Total	329	16,84	5,382				
TAITotalScore	15	79	44,18	12,864				
	16	79	45,19	11,396	2,187	3/325	,089	
	17	71	42,24	11,241				
	18	100	41,14	10,721				
	Total	329	43,08	11,600				
Acceptance	15 <sub>a</sub>	78	45,63	7,179				
Involvement(Mother)	16 <sub>b</sub>	79	43,04	7,704	2,784	3/325	,041*	a>c
	17 <sub>c</sub>	70	42,21	9,204				
	18 <sub>d</sub>	100	42,56	8,654				
	Total	327	43,33	8,293				
Acceptance	15	78	41,88	9,786				
Involvement(Father)	16	79	40,32	8,200	1,242	3/325	,295	
	17	70	39,10	10,293				
	18	98	39,60	9,923				



			Total	325	40,22	9,594		
Strict	Control	and	15	78	34,06	6,419		
Supervision(Mother)			16	79	34,38	7,778	2,247	3/325 ,083
			17	70	31,54	7,849		
			18	100	32,57	8,396		
			Total	327	33,14	7,738		
Strict	Control	and	15	78	32,59	7,145		
Supervision(Father)			16	79	31,63	8,652	1,283	3/325 ,280
			17	70	30,13	8,202		
			18	98	30,63	9,457		
			Total	325	31,24	8,492		
Irrational Beliefs			15	79	59,27	7,546		
			16	79	59,59	7,108	1,792	3/325 ,149
			17	71	61,23	6,866		
			18	100	61,31	7,444		
			Total	329	60,39	7,294		

\*p<0,05

According to the one-way variance analysis of the variables of the test anxiety, perceived parental attitudes and irrational beliefs according to the age variable, the acceptance /involvement of the mother by subscale [F (3/325) =2,411 p <0,05] was found as statistically significant. According to the Post hocTukey analysis performed to examine the differences in the average scores, 15-year-old students' scores were found as higher than 18-year-old students in the subscale of acception / involvement from mothers subscale.

**Table 11. Analysis of Variance Findings of High School Students' Test Anxiety, Parents' Attitudes and Irrational Beliefs According to Father's Educational Levels**

<i>Fathers' Education</i>		<i>N</i>	<i><math>\bar{x}</math></i>	<i>Ss</i>	<i>F</i>	<i>Sd</i>	<i>p</i>
TAI Emotionality Subscale	Primary	79	26,55	7,302			
	Secondary	57	25,17	5,676	,478	3/302	,697
	High School	101	26,26	6,982			
	University	69	25,97	7,344			
	Total	306	26,07	6,913			
TAI Worry Subscale	Primary	79	17,35	5,356			
	Secondary	57	15,78	4,160	1,131	3/302	,337
	High School	101	16,38	5,782			
	University	69	17,05	5,848			
	Total	306	16,67	5,425			
TAI TotalScore	Primary	79	43,91	11,985			
	Secondary	57	40,96	9,238	,713	3/302	,545
	High School	101	42,65	12,198			
	University	69	43,02	12,562			
	Total	306	42,74	11,719			
Acceptance Involvement(Mother)	Primary	79	43,55	7,733			
	Secondary	57	42,77	9,325	,250	3/302	,861
	High School	100	43,84	6,824			
	University	69	43,85	9,078			
	Total	305	43,57	8,070			

Acceptance	Primary	78	40,38	9,049			
Involvement(Father)	Secondary	57	39,28	11,504	,716	3/302	,543
	High School	100	41,23	8,530			
	University	69	41,46	9,180			
	Total	304	40,70	9,412			
Strict Control and Supervision (Mother)	Primary	79	32,25	7,437			
	Secondary	57	32,92	8,079	2,498	3/302	,060
	High School	100	34,65	7,410			
	University	69	31,63	8,082			
	Total	305	33,02	7,757			
Strict Control and Supervision (Father)	Primary	78	29,96	8,727			
	Secondary	57	31,40	9,814	2,520	3/302	,058
	High School	100	33,10	7,723			
	University	69	30,18	8,260			
	Total	304	31,31	8,589			
Irrational Beliefs	Primary	79	60,05	6,795			
	Secondary	57	61,17	7,253	1,000	3/302	,393
	High School	101	60,68	7,110			
	University	69	59,11	8,099			
	Total	306	60,25	7,293			

According to ANOVA findings of the students' test anxiety, perceived parental attitudes and irrational beliefs according to the father's educational level variable, it was found that the father's education did not indicate significant differences from the mean scores of test anxiety, perceived parental attitudes and irrational beliefs ( $p > 0,05$ ).

**Table 12. Analysis of Variance Findings of High School Students' Test Anxiety, Parents' Attitudes and Irrational Beliefs According to Mother's Educational Levels**

<i>Mothers' Education</i>	<i>N</i>	<i><math>\bar{x}</math></i>	<i>Sd</i>	<i>F</i>	<i>Sd</i>	<i>p</i>	<i>Tukey</i>
TAIEmotionalitySubscale	Primary <sup>a</sup>	94	26,42	7,369			
	Secondary <sup>b</sup>	86	26,96	6,203			
	High School <sup>c</sup>	97	24,15	6,647	4,590	3/302	,004* d>c
	University <sup>d</sup>	29	28,68	7,010			
	Total	306	26,07	6,913			
TAIWorrySubscale	Primary <sup>a</sup>	94	16,80	5,097			
	Secondary <sup>b</sup>	86	16,95	5,489	3,028	3/302	,030*
	High School <sup>c</sup>	97	15,62	5,491			d>c
	University <sup>d</sup>	29	18,93	5,483			
	Total	306	16,67	5,425			
TAITotalScore	Primary <sup>a</sup>	94	43,23	11,881			
	Secondary <sup>b</sup>	86	43,91	11,033	4,209	3/302	,006* d>c

			High School <sup>c</sup>	97	39,78	11,611			
			University <sup>d</sup>	29	47,62	11,632			
			Total	306	42,74	11,719			
<hr/>									
Acceptance			Primary <sup>a</sup>	94	42,77	8,031			
Involvement(Mother)			Secondary <sup>b</sup>	86	43,00	8,851			
			High School <sup>c</sup>	96	44,63	7,545	1,086	3/302	,355
			University <sup>d</sup>	29	44,31	7,373			
			Total	305	43,57	8,070			
<hr/>									
Acceptance			Primary	93	40,50	9,885			
Involvement(Father)			Secondary	86	41,30	8,681	,497	3/302	,685
			High School	96	40,89	9,454			
			University	29	38,89	10,040			
			Total	304	40,70	9,412			
<hr/>									
Strict	Control	and	Primary	94	32,71	7,344			
Supervision(Mother)			Secondary	86	34,22	8,069	1,035	3/302	,377
			High School	96	32,27	7,703			
			University	29	33,00	8,276			
			Total	305	33,02	7,757			
<hr/>									
Strict	Control	and	Primary <sup>a</sup>	93	30,33	8,143			
Supervision(Father)			Secondary <sup>b</sup>	86	33,65	8,384	3,164	3/302	,025*d>c

	High School <sub>c</sub>	96	30,16	8,955			
	University <sub>d</sub>	29	31,34	8,393			
	Total	304	31,31	8,589			
Irrational Beliefs	Primary	94	60,01	7,518			
	Secondary	86	60,63	6,749	,374	3/302	,772
	High School	97	60,49	6,970			
	University	29	59,13	9,202			
	Total	306	60,25	7,293			

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\*p<0,05

According to the ANOVA findings including the students' test anxiety, perceived parental attitudes and irrational beliefs according to the mother's educational level variable, emotionality dimension of the test anxiety [ $F(3/303) = 4,590$ ;  $p < 0,05$ ], worry subscale [ $F(3/302) = 3,028$ ;  $p < 0,05$ ] total score [ $F(3/302) = 4,209$ ;  $p < 0,05$ ] and strict control and supervision as father attitudes [ $F(3/302) = 3,164$ ;  $p < 0,05$ ] is statistically significant. According to the Post hoc Tukey analysis conducted to examine the difference of the mean scores, it was found that the test anxiety scores of the children whose mothers were university graduates were significantly higher. The strict control and supervision attitudes of the father were found to be the highest among the students whose mothers were middle school graduates.

## 5. DISCUSSION

In this study, perceived parental attitudes of high school students, anxiety of exam and Irrational Belief are examined. The aim of this study was to confirm the hypotheses of the study by 341 high school students. The findings were compared with the results obtained in previous studies. First of all, findings inquired from statistical analyses showed that test anxiety worry subscale is negatively related to perceived acceptance / involvement sub-dimension scores from mothers and perceived acceptance / involvement points from the father. In addition, the sub-dimension scores perceived by parents and irrational beliefs. were found to be positively correlated withand the sub-dimension of worry. Additionally, emotionality sub-dimension is negatively correlated with perceived acceptance / involvement sub-dimension scores from mothers and perceived acceptance / involvement points from the father in a similar way with worry sub-dimension. In addition, the sub-dimension scores perceived by parents and the sub-dimension of worry were found to be positively correlated with irrational beliefs. Test anxiety total scores were negatively correlated with perceived acceptance / involvement sub-dimension scores from mothers and perceived acceptance / involvement scores from the father consistent with the test anxiety sub-dimensions. Test anxiety total scoresand worry subscale were significantly predicted by the perceived acceptance / involvement from mother sub-dimension and irrational beliefs. However, test anxiety emotionality subscale was only predicted by irrational beliefs. Among the demographic variables, test anxiety was found to be higher with all its sub-dimensions in male students. Worry subscale scores of vocational high school students were found as higher than those studying in Anatolian high schools. High school first-graders' worry subscale and perceived acceptance / involvement points from the mother were also found as higher. 15-

year-old students have significantly higher scores in perceived acceptance / involvement scores from the mother. Students who have university graduate mothers have higher test anxiety scores. In addition, students whose mothers were graduated from secondary school had higher perceived strict control / supervision scores from their fathers. The questionnaire given to the participants includes questions about sociodemographic information form and personal information.

In addition to findings mentioned above, descriptive results were also identified in this study. The percentages of gender, age, class, parental education level and high school type variables of the participants were obtained through questions in the sociodemographic information form. According to the gender, the number of boys and girls was similar; however, the number of girls was higher than boys. According to the age variable, 30% of the participants were 18 years old. 15-18 age students participated in the study. Based on students' grades, it was found that the number of high school senior students is higher. According to the high school types, approximately 60% of the students are composed of vocational high school students. In the study, the students were not asked about the type of vocational high school. Apart from vocational high school, other students are educated in Anatolian high school.

The students were asked about the parental education level and the level of education of the parents was highest. In addition, it is seen that the number of university graduates is higher than that of university graduates.

Perceived parental attitudes, test anxiety, and Irrational Beliefs, which are research variables, were first compared to demographic variables with sub-dimensions within the scales. First, the perceived parental attitudes of the students according to the gender variable, the dimensions of the test anxiety and the differences of the Irrational Belief were evaluated. The results show that male students have more anxiety about exam. In the literature, it was determined that the test anxiety scores of the female students were higher than the male students (Bacanlı and Sürücü, 2006; Erözkan, 2004).

In the study conducted by Erdik and Özpınar (2015), the relationship between test anxiety and parental attitudes was examined in high school students. It was found that female students' test anxiety was higher than that of males. It is emphasized that the result obtained may be related to the success of female students because they have an important status and qualifications in terms of their social identity and they may be related to their being more



focused on exams. However, it can be thought that the male students' test anxiety is high in this study and that the social identity is important for gaining a university examination and having a profession. In another study, Çiçek and Tanhan (2018) found that test anxiety levels did not differ according to gender.

According to the high school types, the test anxiety scores of the participants differed significantly, and the worry subscale scores of the vocational high school students were higher than those of the Anatolian high school students. The result obtained may be due to the fact that the vocational high school and Anatolian high school curricula are different; It is thought that students studying at vocational high schools may be more anxious due to the lack of academic support in terms of academic preparation. Vocational high schools are defined as the type of high school where students can take courses for different professional fields. The students of Anatolian high schools may have less anxiety in this regard than the vocational high school students because they can take more supportive courses for the university exam. Although a study on this subject is not included in the literature, it has been observed that studies conducted with high school students cover students in general or in a single high school type (Çiçek & Tanhan, 2018; Erdik & Özpınar, 2015).

Findings that reflect the parallelism between age variables and class variables were obtained. Among the results, it was found that the mean scores of the 15 years old and high school freshman students were higher than the older students who were studying in the upper grades and did not worry. It is thought that this situation may be in the stage of adapting both the contents of the high school freshman and the students to a new school environment in general and they may feel expectant anxiety. In addition, 15 years of age is a critical period in which individuals are described and transformed from a psychosocial perspective. It is thought that adaptation to new situations may be difficult for individuals of this period and age. Adolescence is defined as an important transition phase between childhood and adulthood (Kulaksızoğlu, 2002). In this period, it is stated that important psychosocial parameters such as family, school and peer relations have different meaning and importance in terms of adolescents. In this respect, the worry sub-dimension found in 15-year-old students is thought to be both a concern of failure and a situation caused by the changes and results of the period. It is seen that the studies conducted with high school students of the exam anxiety were made with high school senior students who are in the preparation period for the entrance exam to universities (Çiçek & Tanhan, 2018; Güler & Çakır, 2013).

Based on the level of parents' education levels, students' perceived parental attitudes, exam anxiety and Irrational Belief It was found that mother education level showed differences in test anxiety scores of students. Regarding the result, it can be considered that mothers are more interested in the academic functionality of their children and therefore may have more expectations from their children and this expectation may be seen more or less than the mother's level of education. In another study, in a study by Dubow, Boxer and Huesman (2010), they suggested that the educational level of parents had a long-term impact on children's academic and professional success. When the level of intelligence and socioeconomic status of the child are taken under control, it is observed that the variables that predict the academic and professional success of the children are the education level of the families and the importance of the prestige of the professions and the importance of education in the adolescents with high school and after high level. It is thought that the level of education of the mother reflects the differences in the anxiety of the children in terms of education and it can be explained by the expectation of the child. In this study, it was seen that the education level of the father did not cause the same level of difference. Another variable in which mother education level reflects difference is the strict control and supervision subdimension perceived from father. It was observed that the Strict Control and Supervision sub-dimension scores of the students with secondary school graduate mothers were higher than their fathers. This may be due to the possibility that the father can play a more active role in the decision-making process than the mother, or that he or she may have more control over the children.

The relationship between perceived parental attitudes, test anxiety, and irrational belief levels were investigated in the relational analysis findings in which the main problems and hypotheses of the study were examined. According to the findings, anxiety and emotionality sub-dimensions of test anxiety and total test anxiety scores were found to be related to perceived parental attitudes and Irrational Beliefs. Exam anxiety worry sub-dimension includes cognitive processing of test anxiety concerns; The sub-dimension of emotionality encompasses physiological symptoms and the extent to which the anxiety is felt (Enright et al., 2000).

The anxiety, emotionality and total scores were negative with perceived acceptance and involvement sub-dimensions from parents; It was found to be positively related to the sub-dimensions of Strict Control and Supervision perceived from parents. The results of the study are consistent with other studies examining the relationship between test anxiety and

parental attitudes in the literature. In a study conducted by Erdik and Özpınar (2015), it was found that there was a significant relationship between the perceived authoritarian attitude of parents and high school students' test anxiety. In the study, parental attitudes towards male and female students were different and more protective to female students; male students showed more authoritarian attitude.

Among the studies figuring out the association between parental attitudes and test anxiety, Kuzgun (1972), parental attitudes have an important effect on the self-realization and self-perception of individuals. It was stated that lower self-esteem could be seen in the children of parents who were not interested, who had strict rules and who were authoritarian. This situation may prevent children and adolescents to realize themselves and increase their anxiety in critical periods in their academic life. In another study by Yavuzer (1999), it was concluded that the supportive and relevant attitudes of parents towards their children had a significant impact on the healthy psychosocial development of children and adolescents.

When the relationship between exam anxiety and Irrational Beliefs is examined, the anxiety, emotionality and total scores were found to be positively and significantly related to Irrational Beliefs. In other words, the participants who reported high scores of exam anxiety also had high scores from the Irrational Belief. Bridges and Harnish (2010) stated that the relationship between irrational thoughts and depression and anxiety can be explained by negative emotions as a result of the negative and self-criticism of their comments on the events they encounter. It is known that the concept of Irrational Beliefs is a concept suggested by Rational Emotional Behavioral Therapy (REBT) approach. REBT aims to change non-functional emotional and behavioral outcomes, especially by focusing on early experiences of individuals in the origin of negative and self-criticizing thoughts (Ellis, 1991). In this study, as a result of the Irrational Belief of the people and their interpretation and conclusions about the world and the unfavorable and unfavorable result, they are found to be closer to feeling negative and behaving. Exam anxiety can be defined as the intense anxiety that people feel before or during the exam as a result of their fears about failing. There is a situation where people are expected to fail because of their anticipated concern about failure and at the same time they feel anxiety because they fail. In this cycle, students may experience decreases in academic area.

In the study, the relationship between test anxiety, perceived parental attitudes and Irrational Belief was found and the predictive and explanatory relationship of the variables was examined separately. According to the findings, the anxiety dimension is

predicted negatively by the mother's perceived interest and love attitude. The result obtained, the perceived interest from mothers and low level of affection explain the high scores of worry subscale scores. On the other hand, Irrational Beliefs positively predicts the students' worry subscale scores. The result shows the high scores of the Irrational Belief's test anxiety worry subscale. The same findings were also found in the total scores of test anxiety. The low acceptance and involvement of the mother and the higher Irrational Belief are explained by the higher scores in students' test anxiety.

Rational Emotional Education (ADE), which is structured within the framework of the Rational Emotional Behavioral (REBT) approach, is used for Irrational Beliefs and test anxiety. In this model, positive self-acceptance, critical thinking, scientific foundations and behavioral changes in self-understanding are aimed against students' negative feelings such as anxiety and depression (Krauss & Krauss, 1974). Firstly, ADE was introduced at primary level; then it became an educational model used in all levels of education. Among the areas that have proven to be particularly effective are students' fear of being evaluated negatively, communication problems and exam anxiety.

## **6. CONCLUSION**

In the light of the findings obtained in the study, demographic variables, perceived child rearing styles and irrational beliefs related to test anxiety of high school students were evaluated. According to the results, the test anxiety levels of the students differ in terms of demographic variables (gender, class, age, maternal education level, high school type). On the other hand, test anxiety was positively correlated with irrational beliefs. This situation may reflect that the anxiety of the test is a situation that can occur within the framework of the irrational beliefs of individuals. On the other hand, test anxiety were found as associated with perceived parenting attitudes Acceptance / involvement, which can be defined as positive attitudes, was correlated negatively. Furthermore, parental strict control / supervision levels which can be considered as negative attitudes are positively related to test anxiety. It is thought that parental attitudes may be factors that will determine the expectations and mood of students about their academic performance.

## **7. RECOMMENDATIONS**

It is thought that the advanced studies to be carried out within the framework of the obtained results can be focused especially on parents' attitudes and academic achievement and on students' irrational beliefs. According to the results of the study, it was found that there is a significant relationship between students' test anxiety and irrational thoughts. It is thought that the study, which is thought to be repeated with further studies and with different sample groups, contributes to the determination of intervention approaches. The prevalence of exam anxiety in high school students is known. Therefore, Rational Emotive Education (REE) as a part of school counseling and guidance services can be provided at both individual and group settings so that irrational beliefs can be replaced by rational beliefs which may facilitate performance better especially in university entrance exams...

## REFERENCES

- Adana F. , Kaya, N. (2005). “Lise Öğrencilerinin Sınav Kaygısı Düzeyi Üzerine Sınav Kaygısı İle Başa çıkma Eğitiminin Etkisi”, Kafkas Üniversitesi, Kars Sağlık Yüksekokulu, *Kriz Dergisi*;13(2):35-42.
- Abalı, O. (2006). *Ergenlik Dönemi ve Sorunları*. İstanbul: Epsilon Yayıncılık.
- Ahmed, Z. (2015). Pre-exam Anxiety among students and its coping mechanism. *Rawal Medical Journal*, 40(2), 233-236.
- Altıntaş, E. ve Gültekin, M. (2003), *Psikolojik Danışma Kuramları*. İstanbul: Alfa Yayınları.
- Altuğ, D.(2004).*Çocukluktan Yaşlılığa Kendilik Değeri*. Başkent Üniversitesi İletişim Fakültesi, Haberal Eğitim Vakfı. Ankara: Matus.
- Bacanlı, F., & Sürücü, M. (2006). İlköğretim 8. sınıf öğrencilerinin sınav kaygıları ve karar verme stilleri arasındaki ilişkilerin incelenmesi. *Kuram ve Uygulamada Eğitim Yönetimi Dergisi*, 12(1), 7-35.
- Baştürk, R. (2007). Kamu personeli seçme sınavına hazırlanan öğretmen adaylarının sınav kaygı düzeylerinin incelenmesi. *Fırat Üniversitesi Sosyal Bilimler Dergisi*, 17(2), 163-176.
- Baumrind, D. (1966). *Effects of Authoritative Parental Control on Child Behavior*, *Child Development*, 37(4), 887-907.
- Beer, J. (1991). Depression, General Anxiety, Test Anxiety, and Rigidity of Gifted Junior High and High School Children. *Psychological Reports*, 69(3\_suppl), 1128–1130.
- Bernard, M. E. (1995). It's prime time for rational, emotive behavior therapy: current theory and practice, research recommendations, and predictions. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*,13(1), 9-27.
- Beşir, F. H. (2016). *Lise öğrencilerinin sınav kaygılarının bazı değişkenler açısından incelenmesi*. Necmettin Erbakan Üniversitesi.
- Bilgin, Ş. (2001). *Ergenlerde Kaygı İle Benlik Saygısı Arasındaki İlişki*. Yüksek Lisans Tezi. İstanbul: Marmara Üniversitesi.
- Bozaslan, H., Genç, G. ve Kaya, A. (2012). Üniversite öğrencilerinin anne-baba tutumlarının problem çözme becerilerine, sosyal kaygı düzeylerine ve akademik başarılarına etkisi. *Dicle Üniversitesi Ziya Gökalp Eğitim Fakültesi Dergisi*, 18, 208-225.
- Bridges, K.R., & Harnish, R.J. (2010). Role of irrational beliefs in depression and anxiety: A

- review, *Health*, 2(8), 862-877.
- Buschmann, T., Horn, R. A., Blankenship, V. R., Garcia, Y. E., & Bohan, K. B. (2018). The Relationship Between Automatic Thoughts and Irrational Beliefs Predicting Anxiety and Depression. *Journal of Rational -Emotive and Cognitive - Behavior Therapy*, 36(2), 137-162. doi: 10.1007/s10942-017-0278-y
- Caruso, C., Angelone, L., Abbate, E., Ionni, V., Biondi, C., DiAgostino, C., Mezzaluna, C. (2018). Effects of a REBT Based Training on Children and Teachers in Primary School. *Journal of Rational -Emotive and Cognitive - Behavior Therapy*, 36(1). doi: 10.1007/s10942-017-0270-6
- Çiçek, İ & Tanhan, F. (2018). Lise son sınıf öğrencilerinin sınırlılık algı şemaları ile sınav kaygısı düzeyleri arasındaki ilişkinin incelenmesi, Batman University, *Journal of Sciences*, 8(1), 69-85.
- Çivitci, A. (2003), *Akılcı Duygusal Eğitimin İlköğretim Öğrencilerinin Mantıkdışı İnanç, Sürekli Kaygı ve Mantıklı Karar Verme Düzeylerine Etkisi*. (Doktora Tezi). Ankara: G.Ü. Eğitim Bilimleri Enstitüsü.
- Corey, G. (1991). *Theory and Practice of Counseling and Psychotherapy*. (2nd. Ed.) Colifornia: Brooks/Cole Publication Company, Monterey.
- Corey, G. (2008). *Psikolojik Danışma Kuram ve Uygulamaları* (Çev. T. Ergene). Ankara: Mentis Yayıncılık.
- Cormier, S. ve Hackney, H. (2008). *Psikolojik danışma ilke ve teknikleri: psikolojik yardım süreci el kitabı*. (Çev. T. Ergene ve S. Aydemir Sevim). Ankara: Mentis Yayıncılık.
- Covington, M. V., & Omelich, C. L. (1988). Achievement dynamics: The interaction of motives, cognitions, and emotion over time. *Anxiety Research*, 1, 165–183. doi:10.1080/0891777880824871.
- Crawford, T. ve Ellis, A. (1989). A dictionary of rational-emotive feelings and behaviors. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, 7(1), 3-28.
- Cüceloğlu, D (2000). *İnsan ve Davranışı*. (10. Basım). İstanbul: Remzi Kitabevi.
- Çağdaş, A. ve Seçer, Z.Ş. (2005), *Mutlu ve Sağlıklı Yarınlar İçin Anne Baba Eğitimi*. Konya: Eğitim Kitabevi.
- Dawson, B. & Trapp, R. G. (2001). *Basic & Clinical Biostatistics, Lange Medical Book*, McGraw-Hill, Medical Publishing Division. (3rd ed.), Ch. 7-9, PP 161-218.



- Digiuseppe, R. (1996). The nature of irrational and rational beliefs: progress in rational emotive behavior theory. *Journal of Rational-Emotive&Cognitive-BehaviorTherapy* 14(1),
- Dobson, K.S. (1988), *Rational-Emotive Therapy*. Handbook of Cognitive Behavioral Therapies. London: Hutchinson, (214-272).
- Doğan, S. (1995), Akılcı-Duygusal Terapi: Kuramsal Bir İnceleme. *Psikolojik Danışma ve Rehberlik Dergisi*, 2 (6), 29-36.
- Doğan, T. (1999), *Başkent Üniversitesi Öğrencilerinin Stresle Başa Çıkma Stratejilerinin Bazı Değişkenlere Göre İncelenmesi*. Yayınlanmamış Yüksek Lisans Tezi. Hacettepe Üniversitesi, Sosyal Bilimler Enstitüsü. Ankara.
- Dryden,W. (1994). Reason and emotion in psychotherapy: thirty years on. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, 12(2), 83-99.
- Dryden, W. ve Mytton, J. (1999). Four Approaches to Counselling and Psycho therapy. London: Routledge.5-28
- Dryden, W. ve Neenan, M. (2004). Rational Emotive Behavioural Counselling in Action. London: Sage Publication Inc.
- Dubow, E. F., Boxer, P., Huesmann, L. R., Shikaki, K., Landau, S., Gvirsman, S. D., &Ginges, J. (2010). Expo sure to conflict and violence across contexts: relations to adjustment among Palestinian children. *Journal of clinical child and adolescent psychology :the official journal for the Society of Clinical Child and Adolescent Psychology, American Psychological Association, Division 53*, 39(1), 103–116. doi:10.1080/15374410903401153
- Enright, M., Baldo, T., &Wykes, S. (2000). Theefficacy of eyemovementdesensitizationandreprocessingtherapytechnique in thetreatment of test anxiety of collegestudents. *Journal of College Counseling*, 3, 36–48. Retrievedfrom <http://connection.ebscohost.com/c/articles/5188741/efficacy-eye-movement-desensitization-reprocessing-therapytechnique-treatment-test-anxiety-college-students>
- Egbochuku, O.E. Obodo, B. Obadan, N. O. (2008). Efficacy of Rational-Emotive Behaviour Therapy on the Reduction of Text Anxiety Among Adolecents in Secondry School, *European Journal of Social Sciences*, 6(4).
- Ellis, A. (1975). The biological basis of human irrationality. *Journal of Individual Psychology*,32, 145-168.

- Ellis, A. (1984a). Expanding the ABC's of RET. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, 2(2),20-24.
- Ellis, A. (1984b). The Essence of RET 1984. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, 2(1), 19-25.
- Ellis, R. (1991). *Second language acquisition and language pedagogy*. Clevedon: Multilingual Matters.
- Ellis, A. (1993), Reflections on Rational Emotive Therapy. *Journal of Consulting and Clinical Psychology*, 61 (2),199-201.
- Ellis, A. ve Diguiuseppe, R. (1993), Are Inappropriate or Dysfunctional Feelings in Rational Emotive Therapy Qualitative or Quantitative. *Cognitive Therapy and Research*, 17 (5),471-477.
- Ellis, A. (1995). *Current Psychotherapies*. (Edt: R. J. Corsini, D. Wedding. 5th Edition). Illinois: F.E. Peacock Publishers, Inc.
- Ellis, A. (1995), Changing Rational Emotive Therapy (RET) Rational Emotive Behaviour Therapy (REBT). *Journal of Rational Emotive and Cognitive Behaviour Therapy*, 13 (2),85-89.
- Ellis, A. (1995), Thinking Processes Involved in Irrational Beliefs and Disturbed Consequences. *Journal of Cognitive Psychotherapy, An International Quarterly, Number: 2, 105- 113*.
- Ellis, A. (1996), The Humanism of Rational Emotive Behavior Therapy and Other Cognitive Behavior Therapies. *Journal of Humanistic Counseling Education & Development*, 35 (2), 69-88.
- Ellis, A. (1999), Early Theories and Practices of Rational Emotive Behavior Therapy and How They Have Been Augmented and Revised During the Last Three Decades. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, 17 (2).
- Ellis, A. (2000), *Rational Emotive Behaviour Therapy*. (Ed. R.Nelson Jones). Six Key Approaches to Counselling and Therapy. London:Continuum, 181-227.
- Erdik, C., & Özpınar, S. (2015). Üniversite sınavına girecek olan öğrencilerde ana baba tutumu ve sınav kaygısı ile ilişkisi. *International Journal of Family, Child, and Education*, 7, 158-172.
- Ergene, T. (1994). Sınav kaygısı ile başa çıkma programının etkililiği. *Psikiatri, Psikoloji ve Psikofarmakoloji Dergisi*, 2, 36-42.

- Erözkan, A. (2004). Üniversite öğrencilerinin sınav kaygısı ve başa çıkma davranışları. *Muğla Üniversitesi SBE Dergisi Bahar*, 12, 13-38.
- Gençtan, E. (1995), *Piskanaliz ve Sonrası*. İstanbul: Remzi Kitapevi.
- Gençtarım, D. ve Voltan-Acar, N. (2007). Akılcı Duygusal Davranışçı Terapi ve Sezen Aksu Şarkıları. *Eğitim ve Bilim*, 32, 143 (32), 27-40.
- Gladding, S.T. (2004), *Counseling A Comprehensive Profession*. Pearson Merrill Prentice Hall, New Jersey, 219-239.
- Golding, J., Gregory, S., Ellis, G., Nunes, T., Bryant, P., Iles-Caven, Y., & Nowicki, S. (2019). Maternal prenatal external locus of control and reduced mathematical and science abilities in their off spring: A longitudinal birth cohort study. *Frontiers in Psychology*, 10(FEB).
- Göller, L. (2010). *Ergenlerin akılcı olmayan inançları ile depresyon-umutsuzluk düzeyleri ve algıladıkları akademik başarıları arasındaki ilişkiler*. Yayınlanmamış Yüksek Lisans Tezi, Atatürk Üniversitesi, Erzurum.
- Güler, D. (2012) *Lise Son Sınıf Öğrencilerinin Akılcı Olmayan İnançları Ve Anne-Baba Tutumları İle Sınav Kaygısı Düzeyleri Arasındaki İlişkinin İncelenmesi*, Akdeniz Üniversitesi, Sosyal Bilimler Enstitüsü, Yayınlanmamış Yüksek Lisans Tezi, Antalya.
- Güler, D. & Çakır, G. (2013). Lise son sınıf öğrencilerinin sınav kaygısını yordayan değişkenlerin incelenmesi, *Türk Psikolojik Danışma ve Rehberlik Dergisi*, 4(39), 82-94.
- Hembree, R. (1988). Correlates, causes, effects, and treatment of test anxiety. Review of educational research, 58(1), 47-77.
- Hitz, R., & Driscoll, A. (1989). *Praise in the classroom*. Retrieved from <http://files.eric.ed.gov/fulltext/ED313108.pdf>
- Karasar, N. (2014). *Bilimsel araştırma yöntemleri: kavramlar, teknikler ve ilkeler* (27. Baskı). Ankara: Nobel Yayınevi.
- Kayapınar, E. (2006). *Ortaöğretim Kurumları Öğrenci Seçme ve Yerleştirme Sınavı (OKS)'na Hazırlanan İlköğretim 8. Sınıf Öğrencilerinin Kaygı Düzeylerinin İncelenmesi (Afyonkarahisar İli Örneği)*. Yayınlanmamış Yüksek Lisans Tezi, Afyonkarahisar Kocatepe Üniversitesi. Sosyal Bilimler Enstitüsü.
- Kılıç, B. G., Koçkar, A. İ. ve Şener, Ş. (2002). İlköğretim öğrencilerinde sınav kaygısı ve akademik başarı. *Çocuk ve Gençlik Ruh Sağlığı Dergisi*, 9(2), 100-103.
- Krauss, H.H. & Krauss, B. J (1974), *Living with anxiety & Depression*, Chicago: Thomas Morepress.

- Kulaksızoğlu, A. (2002). *Ergenlik Psikolojisi*. İstanbul: Remzi Kitabevi.
- Kulaksızoğlu, A. (2004), *Ergenlik Psikolojisi*. İstanbul: Remzi Kitabevi.
- Kuzgun, Y. (1972), *Ana baba tutumlarının kendini gerçekleştirme düzeyine etkisi* (Yayınlanmamış Doktora Tezi). Ankara: Hacettepe Üniversitesi. Hacettepe Üniversitesi. Eğitim Bölümü.
- Maccoby, E. E., & Martin, J. A. (1983). *Parent-child Interaction*. PH Mussen (Series Ed.) & EM Hetherington (Vol. Ed.), *Handbook of child psychology*, 4, 1-101.
- Mandler, M. J., & Sarason, S. B. (1952). A study of anxiety and learning. *Journal of Abnormal and Social Psychology*, 47, 166-173.
- McKay, G. D. (1976). *The basics of encouragement*. Coral Springs, FL: Communication and Motivation Training Institute, Inc.
- Morris, Larry W.; Liebert, Robert M. Relationship of cognitive and emotional components of test anxiety to physiological arousal and academic performance. *Journal of Consulting and Clinical Psychology*, 1970, 35.3: 332.
- Nelson-Jones, R. (1982), *Danışma Psikolojisi Kuramları*, (Çev Ed: Füsün Akkoyun). Ankara: Nobel Yayıncılık.
- Naveh-Benjamin, M., McKeachie, W. J., Lin, Y.-g., & Holinger, D. P. (1981). Test anxiety: Deficits in information processing. *Journal of Educational Psychology*, 73(6), 816-824.
- Outar, L., Turner, M. J., Wood, A. G., & Lowry, R. (2018). "I need to go to the gym": Exploring the use of rational emotive behaviour therapy upon exercise addiction, irrational and rational beliefs. *Performance Enhancement and Health*, 6(2), 82-93. doi: 10.1016/j.peh.2018.05.001
- Öner, N. ve LE Compte, A (1985). *Durumluluk-Süreklilik Kaygı Kaygı Envanteri El Kitabı*. (2.Basım). İstanbul: Boğaziçi Üniversitesi Yayınları.
- Öner, N. (1990). *Sınav Kaygısı Envanteri El Kitabı*. Yüksek Öğretimde Rehberliği Yayıma Vakfı Yayını No:1.
- Patterson, C.H. *Theories of Counseling and Psychotherapy*. Harper and Row Publishers, New York, 1966.
- Ringeisen, T., & Raufelder, D. (2015). The interplay of parental support, parental pressure and test anxiety -Gender differences in adolescents. *Journal of Adolescence*, 45, 67-79. doi: 10.1016/j.adolescence.2015.08.018

- Rosner, R. (2011). Albert Ellis' Rational-Emotive Behavior Therapy. *Adolescent Psychiatry*, 1, 82-87.
- Sahin, H., Gunay, T., & Bati, H. (2006). University entrance exam anxiety of senior high school students in the Province of Izmir, District of Bornova. *STED*, 5, 107-113.
- Sælid, G. A., & Nordahl, H. M. (2017). Rationalemotivebehaviourtherapy in highschoolstoeducate in mentalhealthandempoweryouthhealth. A randomizedcontrolledstudy of a briefintervention. *CognitiveBehaviourTherapy*, 46(3), 196-210. doi: 10.1080/16506073.2016.1233453.
- Sarason, I. G. (1984). Stress, anxiety, and cognitive interference: reactions to tests. *Journal of personality and social psychology*, 46(4), 929.
- Sarason, S. B. (1990). *The Predictable Failure of Educational Reform: Can We Change Course before It's Too Late? The Jossey-Bass Education Series and the Jossey-Bass Social and Behavioral Science Series*. Jossey-Bass, Inc., Publishers, PO Box 44305, San Francisco, CA 94144-4305.
- Sezer, Ö. (2010). Ergenlerin kendilik algılarının anne baba tutumları ve bazı faktörlerle ilişkisi. *Yüzüncü Yıl Üniversitesi Eğitim Fakültesi Dergisi*. VI,(1), 1-19.
- Shadach, E., & Ganor-Miller, O. (2013). The role of perceivedparentalover-involvement in student test anxiety. *EuropeanJournal of Psychology of Education*, 28(2), 585-596. doi: 10.1007/s10212-012-0131-8
- Sherman, R., & Dinkmeyer, S. (1987). *Systems of familytherapy: An Adlerianintegration*. New York, NY: Routledge.
- Soni, A., & Kumari, S. (2017). The Role of Parental Math Anxietyand Math Attitude in TheirChildren's Math Achievement. *International Journal of Science and Mathematics Education*, 15(2), 331-347. doi: 10.1007/s10763-015-9687-5
- Spence, J.T., & Spence, K.W. (1966). Themotivationalcomponents of manifestanxiety: Drive anddrivestimuli. In C.D. Spielberger (Ed.), *Anxietyandbehavior*. New York: AcademicPress
- Spence, K. W. (1958). A theory of emotionallybaseddrive (D) anditsrelationtoperformance in simplelearningsituations. *Amer. Psychol.*, 1958, 13, 131-141.
- Spencer, S. (2005), *Rational Emotional Behavior Therapy: It's Effectiveness With Children*. A Research Paper Submitted in Partial Fullfilment of the Requiriments for the Master of Science Degree in Guidance and Counseling, The Graduate School University of Wisconsin-Stout.

- Spielberger, C. D. (1966). *Theory and research on anxiety. Anxiety and behavior*. New York Academic press.
- Spielberger, C. (1972). *Theory and Research in Anxiety*. New York, Academic Press.
- Spielberger, C.D. (1980), *Sınav Kaygısı Envanteri El Kitabı*. Çeviren: Necla Öner ve Deniz Albayrak Kuymak. A.B.D .Güney Florida Üniveristesi.
- Spielberger, C. D. ve Vagg, R. (1995). *Test anxiety: theory assesment and treatment*. Washington, DC: Taylor & Francis.
- Spielberger, C. D. ve Vagg,R. (1995b). *Test anxiety: A transactional process model*. Washington, DC: Taylor & Francis.
- Sümer, N. ve Güngör, D. (1999). Çocuk yetiştirme stillerinin bağlanma stilleri, benlik değerlendirmeleri ve yakın ilişkiler üzerindeki etkisi. *Türk Psikoloji Dergisi*, 14 (44), 35-62.
- Steinberg, L., Mounts, N. S., “Authoritative Parenting and Lamborn, S. D., Dornbusch, S. M. (1991): Adolescent Adjustment Across Varied Ecological Niches,” *Journal of Research on Adolescence*, 1, 19–36.
- Steinberg, L., Lamborn, S. D., “Over-time Changes in Adjustment Darling, N., Mounts, N. S., and Competence Among Dornbusch, S. M. (1994): Adolescents from Authoritative, Authoritarian, İndulgent and Neglectful Families,” *Child Development*, 65, 754–770.
- Szentagotai, A. ve Kalay, E. (2006), The Faster You Move The Longer You Live- A Test of Rational Emotive Behavior Therapy. *Journal of Cognitive and Behavioral Psychotherapies*, 6 (1).
- Tobias, S. (1985). Test anxiety: Interference, defectiveskillsandcognitivecapacity. *EducationalPsychologist*, 50, 343-373.
- Türkçapar, H. (2011). *Bilişsel terapi temel ilkeler ve uygulama*. Ankara: HYB Basım Yayın.
- Türküm, A. S., Balkaya, A. ve Karaca, E. (2005). Akılcı olmayan inanç ölçeğinin lise öğrencilerine uyarlanması: geçerlik ve güvenirlik çalışmaları. *Türk Psikolojik Danışma ve Rehberlik Dergisi*, 23,77-85.
- Weinrach, R.G. (2006), Nine Experts Describe The Essence Of Rational-Emotive Therapy While Standing On One Foot. *Journal Of Rational-Emotive & Cognitive-Behavior Therapy* (24) 4.
- Wine, J. D. (1971). Test anxietyanddirection of attention. *PsychologicalBulletin*, 76, 92-104.
- Wood, A. G., Barker, J. B., &Turner, M. J. (2017). Developing performance using rational emotive behavior therapy (REBT): A case study with an elite archer. *Sport*

- Psychologist*, 31(1), 78-87. doi: 10.1123/tsp.2015-0083.
- Yavuzer, H. (1999). *Ana Baba ve Çocuk: Ailede Çocuk Eğitimi*. Remzi Kitabevi.
- Yavuzer, H. (2001). *Çocuk Psikolojisi*. İstanbul: Remzi Kitabevi
- Yavuzer, H. (2009), *Ana-Baba ve Çocuk*. (20. Baskı). İstanbul: Remzi Kitabevi.
- Yavuz, Ç. ve Akagündüz, N. (2004), *Çocuk Olmak*. İstanbul: Ümraniye Rehberlik ve Araştırma Merkezi Müdürlüğü Yayınları.
- Young, J. E., Klosko, J. S., & Weishaar, M. E. (2003). *Schema therapy: A practitioner's guide*. Guilford Press.
- Young, J. E. (1999). *Cognitive therapy for personality disorders: A schema-focused approach*. Professional Resource Press/Professional Resource Exchange.
- Yörükoğlu, A. (1989). *Gençlik Çağı: Ruh Sağlığı ve Sorunları*. 6. Basım. İstanbul: Özgür Yayın Dağıtım.
- Yörükoğlu, A. (2007), *Değişen Toplumda Aile ve Çocuk*. 7. Baskı. İstanbul: Özgür Yayınları.

## **APPENDICES**

### **APPENDIX 1: SOCIODEMOGRAPHIC INFORMATION FORM**

#### **EK-1: DEMOGRAFİK BİLGİ FORMU**

1) Cinsiyetiniz: ( ) Kız ( ) Erkek

2) Yaşınız : .....



## APPENDIX 2: TEXT ANXIETY INVENTORY

.

Hiçbir zaman Bazen Sık sık Her Zaman

1. Sınav sırasında kendimi güvenli ve rahat hissederim. ( 1 ) ( 2 ) ( 3 ) ( 4 )

2. O dersten alacağım notu düşünmek, sınav sırasındaki başarıyı olumsuz yönde etkiler.... ( 1 ) ( 2 ) ( 3 ) ( 4 )

### APPENDIX 3: PARENTING STYLES QUESTIONNAIRE

#### ÇOCUK YETİŞTİRME TUTUMLARI ÖLÇEĞİ (Parenting Styles Questionnaire)

	A N N E M					B A B A M				
	hiç doğr u deği l (1 )	Doğr u değil (2)	kısme n doğr u (3)	doğr u (4)	çok doğr u (5 )	hiç doğr u deği l (1 )	doğr u deği l (2)	kısme n doğr u (3)	doğr u (4)	çok doğr u (5)
1. Benimle sık sık rahatlatıcı bir şekilde konuşurdu										
2. Her davranışımı sıkı sıkıya kontrol etmek isterdi										

#### APPENDIX 4: IRRATIONAL BELIEFS SCALE

					Hiç uygun değil	Pek uygun değil	Kararsızım	Oldukça uygun	Tamamen uygun
1.	Aksilikler	hep	beni	(1)	(2)	(3)	(4)	(5)	
bulur .....									
2.	Başarılı	ve	çalışkan	insanlar	(1)	(2)	(3)	(4)	(5)
saygıdeğerdir.....									





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### İLGİLİ MAKAMA

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Bilgilerinize rica ederim.

Prof. Dr. F. Yeşim EKİNCİ

Rektör Yardımcısı



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Prof. Dr. Servet BAYRAM

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