

Sources of Test Anxiety: A Qualitative Approach¹

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Abstract

Test anxiety comes as an irrefutable fact of education. Testing and being tested, whatever the level of education, is a natural source of concern. The intention of this study is to obtain data that will be the starting point for future intervention programs for test-anxiety. For the research, 10 middle school students and 10 high school students and semi-structured interview forms were interviewed. It has been seen that middle school students describe test anxiety with emotional symptoms and high school students with cognitive symptoms. While the anxiety of the test anxiety affects the life of the students and the influence of the family relations in the high school students is in the preliminary stage, the middle school students show themselves as negative thoughts about the future and the negative affect appears as a common theme in both groups. As sources of test anxiety, we see parents' and teachers' higher success expectations in both age groups. Besides, the words that parents' and teachers' motivational words the students cause them to worry more about not being the anticipated effect in the students. These negative attitudes cause a sense of over responsibility in students. According to the findings of the study, it is revealed that it is a great necessity for the parents and teachers to be involved in the intervention programs for the students who are experiencing the test anxiety.

Keywords: Text anxiety, high school students, secondary school students, source of text anxiety, qualitative research

1. Introduction

Anxiety is uneasiness experienced by an individual due to his/her self or surroundings in his/her conscious or unconscious and caused by the effort of the suppressed material which is causing imbalance to go back to the conscious level (Dinçmen, 2004). Whereas Ellis (1994) defined anxiety as the unsettling emotional situation which arouses the sense of weakness against an anticipated danger, according to Spielberg (1966), individuals' affinity to interpret the stimuli around within their personal threat framework underlies anxiety.

Anxiety is a feeling caused by a possibility of danger stemming from inner or outer world or individuals' perception or interpretation of such a possibility. During anxiety, the individual feels alarmed and like something bad is going to happen (Taşgın, Tekin & Altınok, 2007). According to Sarason (1988), anxiety expresses the feelings of worry, indecision, confusion, fear, pessimism and hopelessness as a reaction exhibited by individuals where they feel insecure, therefore being likely to their physical, emotional and social wellbeing levels (cited in Erözkan, 2011). Anxiety is a situation in which feelings of distress, worry and oppression as well as certain physical reactions occur in the face of cases where the individual feels threatened. Experienced by everyone from time to time and accepted as a normal situation, anxiety can sometimes become severe, turning into a pathological situation. It is known that anxiety may occur in every period of life and several situations can increase the frequency and strength of anxiety. Adolescence is one of the periods during which anxiety is observed the most (Günay, Öncel, Erdoğan, Güneri, Tendoğan & Uğur, 2008; cited in Erözkan, 2011).

Spielberger (1972) explained the anxiety with the model of "state anxiety and trait anxiety." State anxiety is caused by how an individual perceives the current situation as being threatening and dangerous; it is seen that uneasiness is mitigated with the removal of threatening and dangerous situations. Trait anxiety is a personality trait that cannot be directly interpreted in accordance with the situation experienced by the individual but describes individual's affinity to experience anxiety. While state anxiety involves a temporary danger or stress situation, trait anxiety refers to the tendency to feel a danger even in neutral situations and breaks the coherence of individual when observed on an elevated level (Öner & LeCompte, 1985). State of anxiety felt when a student takes a test or before an athlete competes can be an example of state anxiety. In individuals with high trait anxiety, symptoms such as disruption of behaviours, perception and attention disorders, decreased academic achievement, avoidance from interpersonal relations and introversion may occur (Özyürek & Demiray, 2010).

Kashani and Orvaschel (1990) stated that the most negative impacts of anxiety are observed in the domain of interpersonal relations. Reading out load, speaking before the class is difficult for anxious

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children (Kendall et al., 1992). Joining a group, being present in unconstructed social environments, and taking exams are also dangerous issues for anxious children. Such individuals are very sensitive to the negative evaluation and investigation of them by others (Beidel & Turner, 1998).

The state of worry before the exam has a negative impact on the ability to think healthily and the memory itself which are necessary to study effectively while obstructing a clear mind needed for success during the exam. Getting worried during an exam is the direct indicator how unsuccessful the exam will be. When mental sources are spent for worrying, which is a single cognitive task, there is not enough source left to process other information (Goleman, 2003).

Spielberger (1972) defines test anxiety based on his definition of state and trait anxiety as a type of trait anxiety that occurs specifically to the situation and argues that there is a correlation between test anxiety and trait anxiety. According to Spielberger (1995), test anxiety is an unpleasant mood with cognitive, affective and behavioural attributes which is experienced in a formal examination or evaluation setting, stops individuals from putting forth their real performance and makes them nervous. Zeidner (1998) describes test anxiety as possible negative outcomes of tests or similar evaluation situations or phenomenological, psychological and behavioural reactions accompanied by worry about failure.

Spielberger and Vagg (1995) found that there are two aspects of test anxiety which they called worry and emotionality. Worry is the cognitive aspect of test anxiety and involves individual's negative self-evaluations, and negative inner talks and opinions of his/her failure and incompetence. It is a process in which individuals believe that they cannot do what it takes during a test and cannot solve a question and cause themselves to get distracted with negative thoughts such as "What if I cannot succeed, do it?" Emotionality is the emotional aspect which stimulates the autonomous nervous system that is the sensory-physiological part of the test anxiety. It is a process which includes physical reactions such as fast heartrate, sweating, sweltering and feeling chilly, rash, nausea, states of anger and nervousness.

Test anxiety is a feeling which forms during childhood and has its toll gradually in later years. Tight discipline at home, restricting parental attitudes, authoritarian educational-instructional mentality at school, negative, cold and offending teacher criticism, punishments, low grading and challenging grade passing conditions constitute the circumstances leading to test anxiety which develops at early ages. Frequent school failures, negative evaluations by adults and the sense of threat for the self which such situations revoke in individual are crucial factors in the development of test anxiety (Öner, 1989, cited in Erözkan, 2004).

Highly test-anxious individuals can happen to feel like their self-existence is threatened in the situation of test or evaluation. Individuals having these emotions become angry and worried not only during exams but also when they will speak within a group. Such individuals' negative thoughts of themselves can cause them to get easily distracted (Aysan et al., 2001).

In research on how test anxiety affects academic performance, it has been observed that highly test-anxious students fail because they perceive exams as a difficult situation, cannot concentrate on the exam and perform poorly during the exam. It has been also observed that they cannot use their cognitive competencies healthily as they cannot prepare for the exam enough, therefore becoming worried (Cassady, 2004).

Negative feelings are seen such as the fear of failure during the exam, sense of guilt about how student could not study sufficiently, the thought that the time cannot be used efficiently and nothing will be remembered, frequently focusing on the score to be achieved, feeling worthless and unsuccessful compared to other students, and disappointing the parents as well as physiological symptoms such as nausea, hyperactivity, and hypertension. Test anxiety is felt before, during and after tests/exams. Findings of research investigating test anxiety's effects on students show that students' immune system is also influenced by anxiety (Spangler, 1997).

This study is based on the anxieties and the underlying sources of the examination of preparation process for university and high school entry examinations, taking advantage of the views and experiences of senior students. The study will shed light on the development of the right strategies when preparing students for the students, teachers, parents and school administrators. The following answers were searched in the survey:

1. How do students describe test anxiety?
2. How does test anxiety affect students' lives?
3. What are the causes of test anxiety according to students?

2. Methodology

2.1 Research Design

The qualitative research method was adopted in this study to understand the causes of test anxiety and its effects on students. According to Merriam (2009), qualitative research deals with 1) how people interpret

their lives, 2) how they build their worlds, and 3) what meaning they added to their experiences. This research adopted the qualitative research approach to determine how students perceive test anxiety, how they are affected in this process and how they interpret the causes underlying the test anxiety. The phenomenological design, a qualitative research design, was used. While focusing on how individuals comprehend, describe a given phenomenon, what they feel about it, how they judge, recall and make sense of it and what they tell others about it (Patton, 2014), the phenomenological design investigates how people attribute meaning to their experiences with their surroundings (Mulveen & Hepworth, 2006). "Is test anxiety an individual's own subjective problem, or does the surroundings also affect this experience?" is the main hypothesis of the research. The phenomenological approach was adopted, too, so that the research can guide future studies. Because the phenomenological approach does not try to confirm or refute the hypotheses based on the current literature but lays a significant questioning foundation which allows for the re-discussion and investigation of the analysis results in future studies (Sart, 2015).

2.2 Study Group

The criterion sampling method, which is a purposive sampling method, was used when choosing the participants of the research. The purposive sampling method is used to select people who are thought to have rich information about the situation in order to investigate a specific situation in depth (Patton, 2014). The criterion used for choosing the participants of the research was that secondary school students took the first stage of the high school entrance exams and would take the second stage next and high school students took the first stage of the university entrance exams and would take the second stage next and that they defined themselves as test-anxious students. To this end, necessary permissions were received from the Directorate of National Education to conduct research at two high schools and secondary schools in Muğla, and the school counselling services were contacted to ask for their help for referring students with intense anxiety out of those who had consulted the school guidance and psychological counselling service due to test anxiety problem to the research. The school administrations and students were informed of the research, and it was announced that interviews would be performed and they were to be recorded with a voice recorder during the research process. The participations were based on volunteering. All students participated in the research voluntarily had consulted the school guidance and psychological counselling services with complaint of test anxiety. 10 secondary school and 10 high school students took part in the research with 20 students in total. Ages of the participants vary between 16 and 17 for the high schools and 14-15 for the secondary schools.

2.3 Data Collection Instrument

Data are generally collected in interviews in phenomenological research (Mulveen & Hepworth, 2006). Similarly, the interview method was used in this research to collect data, too. As cited by Kuş Saillard (2010) from different researchers, the qualitative interview is a data collection method that reveals participants' perspectives and offer deeper and richer data on their experiences.

A semi-structured interview form consisting of open-ended questions was developed by using the literature and the researchers' experience to use in interviews. The interview form was first reviewed by two faculty members experienced in qualitative research as well as in the field of Psychological Counselling and Guidance and corrected according to the feedback received from them. In addition, the question of whether language impairment and understanding is difficult is examined by a specialist in Turkish language education and necessary corrections are made. The interview form was used for the purpose of piloting, one of the students outside the study group was used for interviewing one of the secondary school students who was a high school student and as a result of this interview, it was checked whether the questions were understandable and whether the students were willing to talk. The interview form was composed of the questions "What is Test Anxiety?", "How does test anxiety affect your life?" and "What do you think about source of text anxiety". These questions were asked in the order of all participants and additional questions were asked in order to get more detailed information from the students according to the progress of the interviewer.

Interview data used in the research were obtained from interviews with 20 students studying at two Anatolian high schools and 2 secondary schools during 2015-2016 academic year spring semester in Muğla province. Negotiations were recorded with a voice recorder and a total of 254 minutes of voice recording was obtained with a minimum of 7 minutes and 25 seconds as part of the survey. The voice recordings were transferred to the computer environment and a total of 42 pages of documents were obtained. The texts were presented to the interviewed students; students were allowed to make changes on the texts and given the final form after the approval of the students.

2.4 Data Analysis

The data obtained in the study were analyzed by content analysis method. In a content analysis study, it is aimed to gather similar data in the framework of certain concepts and themes and interpret and arrange them in a form through which the reader can understand them (Yıldırım & Şimşek, 2008). NVivo 11 program, a computer-aided qualitative data analysis program, was used for data analysis. The induction approach was adopted during the content analysis. A code was assigned to each research question to facilitate the analysis in NVivo, and the answers given by the students were analyzed word by word and sentence by sentence to create codes through NVivo's coding feature. Next, themes were formed to include the common codes. During the coding process, the words used by the participants when expressing their opinions were utilized and the codes were created through direct citations. For specifying the themes, names of themes to cover similar codes were determined by the researchers and the codes were gathered in these themes.

The process of encoding and thematization was conducted by the three researchers individually in the data analysis. At the end of this process aiming to achieve the data reliability, consistency of the codes was examined as “Agreement” or “Disagreement”, and it was found with the formula introduced by Miles and Huberman (1994) that there was agreement among the researchers at 87%. Also for achieving the validity and reliability of the results in the research, the research process was explained in detail and the data were presented with detailed and direct citation as much as possible (Yıldırım & Şimşek, 2008).

The themes specified during the analysis and the correlations among them were illustrated with the support of maps presented by NVivo. Data both on shared opinions and individual opinions were rounded in these illustrations. Hence, the themes could be based on a single student opinion as well as group opinions. The themes were correlated and analyzed in a holistic approach to achieve explanatory results in the data analysis, and the data were clearly described in an effort.

3. Findings

3.1 High School Students

3.1.1 Students Descriptions of Test Anxiety

Holistic view of secondary school students’ opinions on test anxiety are given in Figure 1.

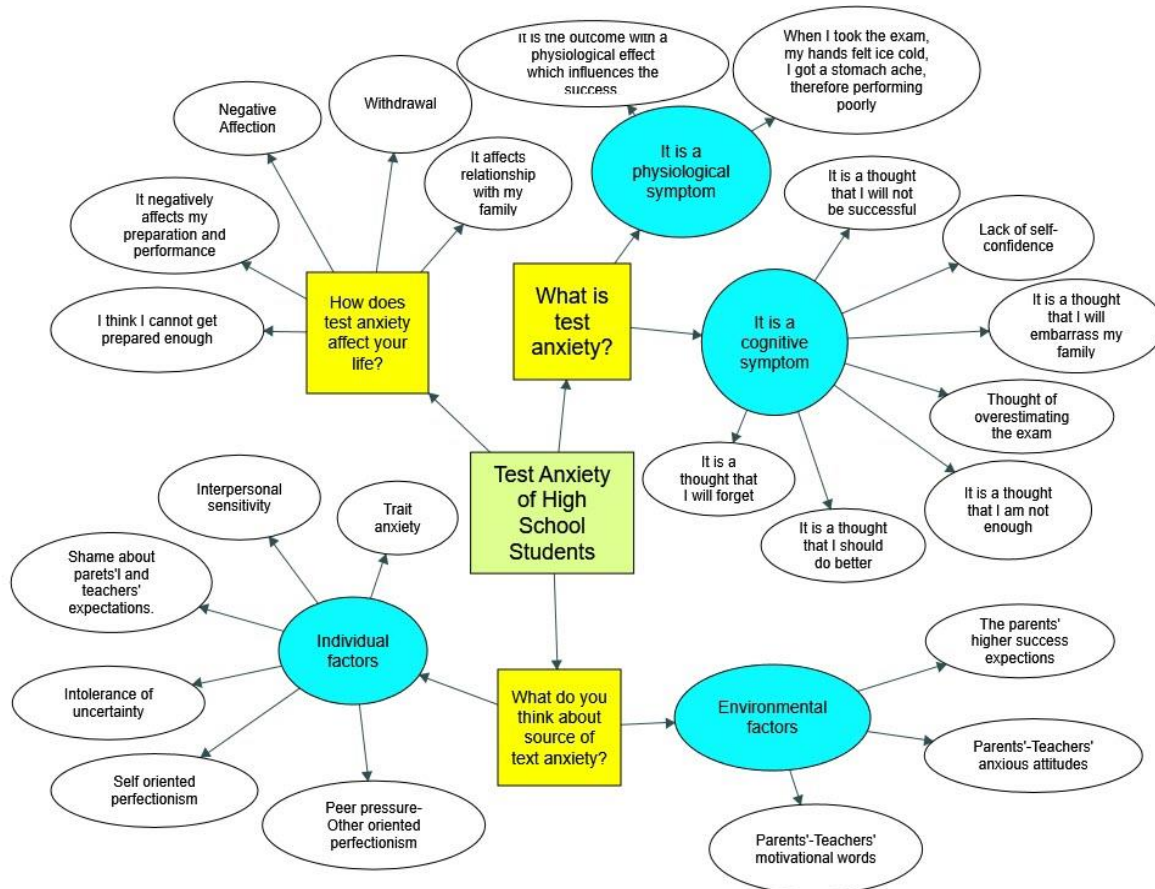


Figure 1. Test Anxiety of High School Students

High school students' opinions on test anxiety descriptions are given in Figure 2. The causes were gathered in two main themes as seen in the figure: It is a Cognitive Symptom (thought that I will forget, thought that I will not be successful, thought that I am not enough, thought that I will embarrass my family, lack of self-confidence, thought of overestimating the exam, and thought that I should do better) and It is a Physiological Symptom.

The first theme in which the high school students described test anxiety is "Cognitive Symptom." The reason why this title was chosen is that cognitive elements were intensive in this theme. As seen in Figure 1, the descriptions of test anxiety as cognitive symptoms were gathered in seven themes (thought that I will forget, a thought that I will not be successful, thought that I am not enough, thought that I will embarrass my family, lack of self-confidence, thought of overestimating the exam, and thought that I should do better). As for the frequency of the codes, thought that I will not be successful, thought that I am not enough, and thought that I should do better are in the forefront and the statements were concentrated on these 3 themes. In the "thought that I will forget" theme, the students provided statements like "I sometimes forget what I know during the exam", "You study for the exam, you think it will not come to your mind during the exam, and you forget what you know in the exam", and "I call it I can't show what I know in the exam." Regarding the "thought that I will not be successful", the students stated "The anxiety caused by the thought that I can't translate what I know into performance during the exam is test anxiety", "Disappointments coming along with the thought that there is so much effort in the exam and I won't be able to do this and that", "We feel the fear with the thought that I can't do it when solving the questions", "I'm studying for the exam but I'm thinking I can't do it", and "Thinking that I can't do it even if I've studied hard ." We can see the following statements under the title of "thought of I am not enough: "Thought that I need to be better", "Anxiety caused by having to be always better due to perfectionism", "I feel the fear with the thought that I can't do it when solving the questions", "Being unprepared is also a cause of anxiety", "It feels like you've poorly studied even if you have sufficiently or much and therefore you think you'll score low in the exam", "Failing to do it even though you've studied hard and thinking that you won't be able to do it anymore."

Under the title of thought that I will embarrass my family, there are the statements "The fear of disappointing my family", "I think test anxiety is a feeling hard to control which we create in our minds and which affects our lives, school life and friends thinking that we are in debt with our families", and "They expect good things from me" while the statements "Failing to do it even though you've studied hard and thinking that you won't be able to do it anymore" and "It's rather self-confidence; I'm studying for the exam but thinking that I can't do it" are seen under the title of lack of confidence, the statements "I can say it's the anxiety caused by being have to be always better. There's a little bit of perfectionism, too." and "I need to be better" under the title of thought that I should do better, and the statements "Overthinking the exam and making it unachievable, making the university we wish to go unachievable." under the thought of overestimating the exam.

The second theme in which the high school students described test anxiety is "Physical Symptoms." This title was chosen because physical elements were observed rather in high school students' descriptions. Descriptions regarding the physical symptoms are given in Figure 2. We can see one of the students described test anxiety as "When I took the exam, my hands felt ice cold, I got a stomach ache, therefore performing poorly" and another student described it as "It is the outcome with a physiological effect which influences the success."

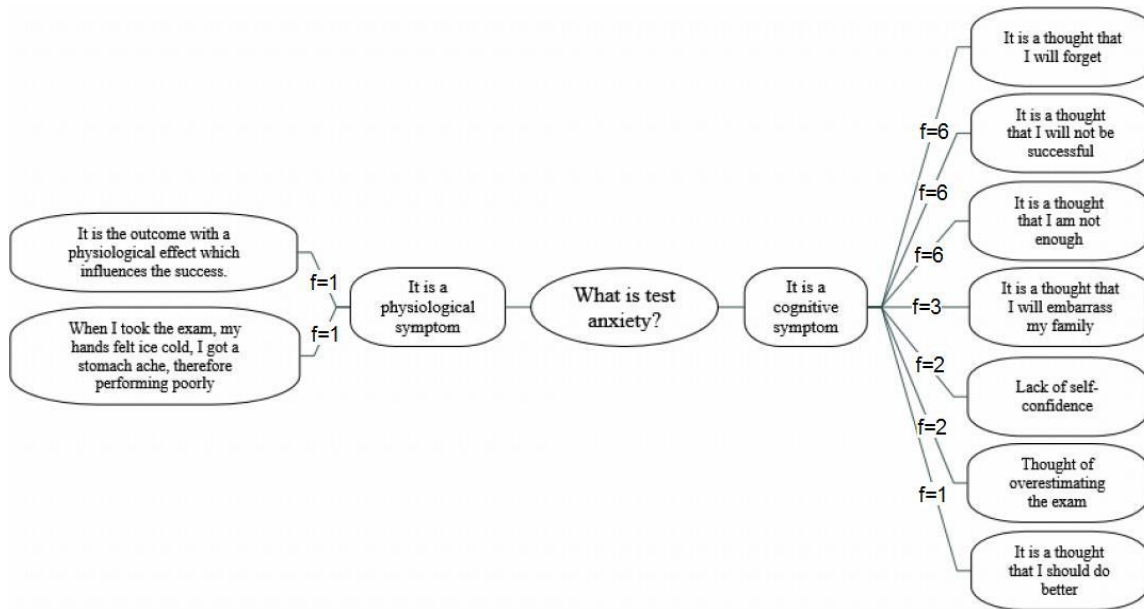


Figure 2. High school students' descriptions of test anxiety

3.1.1.1 How does test anxiety affect your life?

High school students' opinions on how test anxiety affects their lives were thematized as "It affects relationship with my family", "Withdrawal", "Negative affection", "It negatively affects my preparation and performance," and "I think I cannot get prepared enough." as seen in Figure 3.

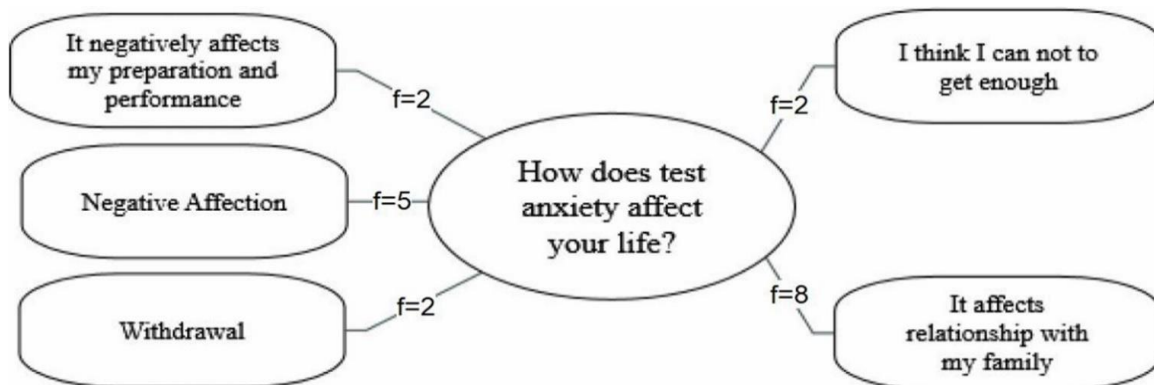


Figure 3. High school students' opinions on how test anxiety affects their lives

Among these themes, we see that majority of them are in "It affects relationship with my family" and "Negative affection." In the theme "It affects relationship with my family", the students stated, "I'm always fighting my family, they're staying on the good side of me.", "They're trying to comfort me but my anxiety affects them, it makes them nervous, too. They become nervous as I do.", "My anxiety makes them anxious. I get even more anxious when they're anxious. We're going round in circles.", "They're stressed. 'What is he doing, how is he studying, is he stringing along with his friends, how much is he studying?' They're worried about these.", "I'm fighting my family the most.", "For example, I was vexed with my mother for a week once." and "It cause trouble at home. Our fathers and mothers get angry with us when we score low."

We can see the following statements in the theme of negative affection: "This turned me into someone very unhappy.", "You mentally collapse.", "This anxiety affects one rather mentally.", "It affects me when I'm studying other than the exams.", "I withdraw and get emotional.". The statements "I move away from

life quite a bit.” and “I’m withdrawing.” can be observed in the “withdrawal” theme which we can regard as the behavioral extension of the negative affection theme.

When examining other themes, there are two themes related to preparation and performance. One of them is “It negatively affects my preparation and performance” which is the behavioral aspect and the other one is “I think I cannot get prepared enough” which is the cognitive aspect. The students stated, “It sometimes stops me from studying and affects my daily life.” and “Being constantly anxious affects my understanding of courses and subjects.” in the theme of “It negative affects my preparation and performance.”. In the theme of “I think I cannot get prepared enough”, we can see the following statements: “How am I going to catch up, where do I start... I overestimate the subjects so much that I can’t know where to begin and sometimes I quit studying for good.” and “This anxiety puts even more pressure. Like how are we going to finish the subjects, do them in time?”.

3.1.1.2 What do you think about source of text anxiety?

High school students’ opinions on the source of text anxiety are given in Figure 4. As seen in the figure, the causes are gathered in two main themes: Individual Factors (peer pressure - other-oriented perfectionism, shame about parents’ and teachers’ expectations, self-oriented perfectionism, interpersonal sensitivity, trait anxiety, intolerance of uncertainty) and Environmental Factors (parents’-teachers’ motivational words, parents’-teachers’ anxious attitudes, parent’s higher expectations of success).

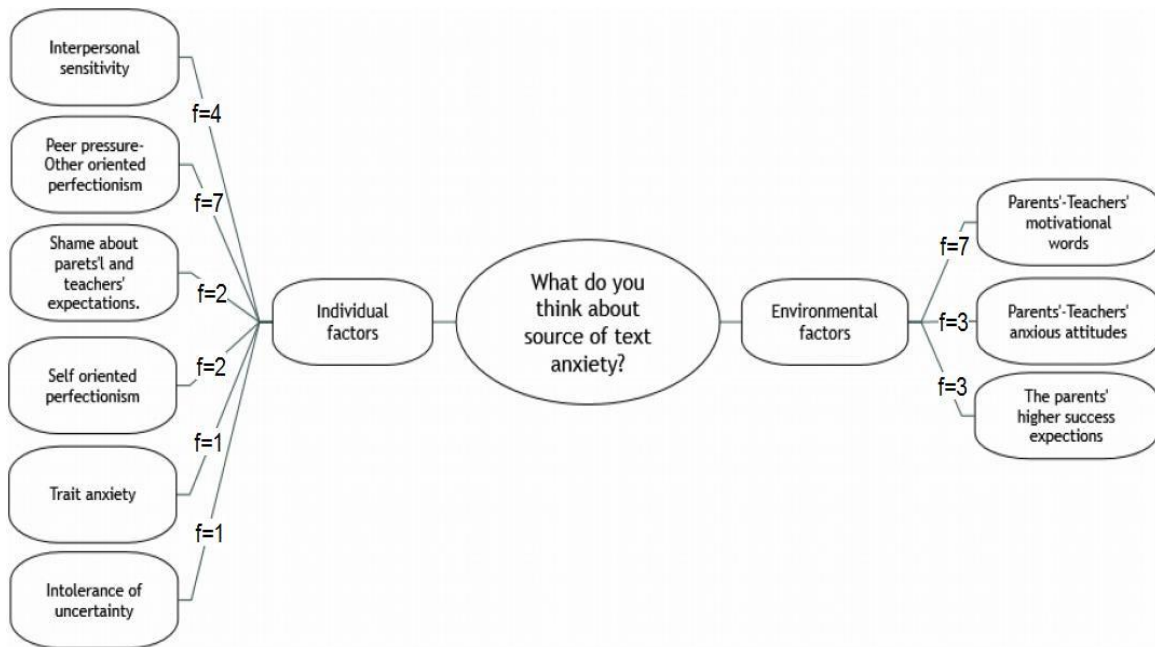


Figure 4. High school students’ opinions on how test anxiety affects their lives

It is seen that the frequency of the “Individual Factors” theme is higher than the other one. The most frequent subtheme of the individual factors is “peer pressure - other-oriented perfectionism.” The following statements can be observed in this theme: “I’m looking at my friends and getting anxious about whether they’ll overrune me and I’ll stay in the background in the exam.”, “I find myself more unsuccessful than others.”, “I can’t study because I don’t refuse my friends. That’s why I feel bad and am affected negatively.”, “When I see my friends studying, my friends ask me what I’ve scored after the exam... I can’t tell them if I score low, so I must do it.”, “Fear of falling behind my friends about the lessons. I think that’s what makes me anxious the most.”, “I don’t want any gap between my friends about the courses subjects.” and “I get more anxious when friends who took the exam before say it’s hard.”.

The “peer pressure - other-oriented perfectionism” subtheme is followed by the “interpersonal sensitivity” subtheme in the theme of individual factors. The following student statements can be found in this theme: “I can’t focus on the course because even something little distracts me.”, “My mood is so fragile now that I’d feel bad no matter who says anything.”, “I can even be affected by the look of

teachers.”, and “It’s us. It’s about oneself and their inner world. I get influenced too quickly.”.

Other themes are closer to each other in terms of frequency. In the “shame about parents’ and teachers’ expectations” subtheme, we can see the statements “But I feel bad as long as I don’t study; especially for my family and teachers.” and “My teachers are very caring about me but I think I can’t meet the value they attach to me. This completely kills me.” while the statements “I see somethings are always missing. It feels like it’s not enough however much I study with the thought that I couldn’t finish it.” and “I think perfectionism is effective.” in the subtheme of self-oriented perfectionism, the statement “I’m an alarming person; I can’t elude the thought that I can’t do it.” in the subtheme of trait anxiety, and the statement “What’s it going to be with me, what am I going to do, where will I go... This uncertainty affects me.” in the subtheme of intolerance of uncertainty.

When ranked based on the frequencies in the other theme of environmental factors, the subtheme of parents’-teachers’ motivational words is in the forefront and it is followed by the subthemes of parents’ higher expectations, and parents’-teachers’ anxious attitudes. We can see the following student statements in the subtheme of parents’-teachers’ motivational words: “It makes me anxious when my teachers always tell me ‘you must study, you must do it’ to motivate me.”, “My anxiety is increased by my teachers’ motivational attitudes.”, “The teacher says ‘Why did you do that? You used to study, what happened? I can even be affected by his look. Maybe he’s not judging me at that moment but that’s what I feel.”, “Our teachers trying to motivate us and decrease our anxiety so that we have less stress but it doesn’t work with me.”, “It makes me more anxious when my parents tell me to leave it this year and try in the next year.”, “They say ‘You can’t pass this year, do it next year, you have to study more’ and this makes me anxious.” and “Our daily talks are generally about the university exam.”.

Whereas the statements “My parents have a high expectation of success in numerical courses.”, “Even if my parents do not react too much when I fail, they mean it by their actions and behaviors.” and “Our poor performance due to anxiety cause troubles at home; our parents get angry with us when we score low” are seen in the subtheme of parents’ higher expectations of success, there are the statements “My parents’ unfavourable attitudes may be effective.”, “Our teachers’ negative attitudes are also effective.” and “It may be caused by teachers’ attitudes.” in the subtheme of parents’-teachers’ anxious attitudes.

3.2 Secondary School Students

3.2.1 Students Descriptions of Test Anxiety

Holistic view of secondary school students’ opinions on test anxiety are given in Figure 5.

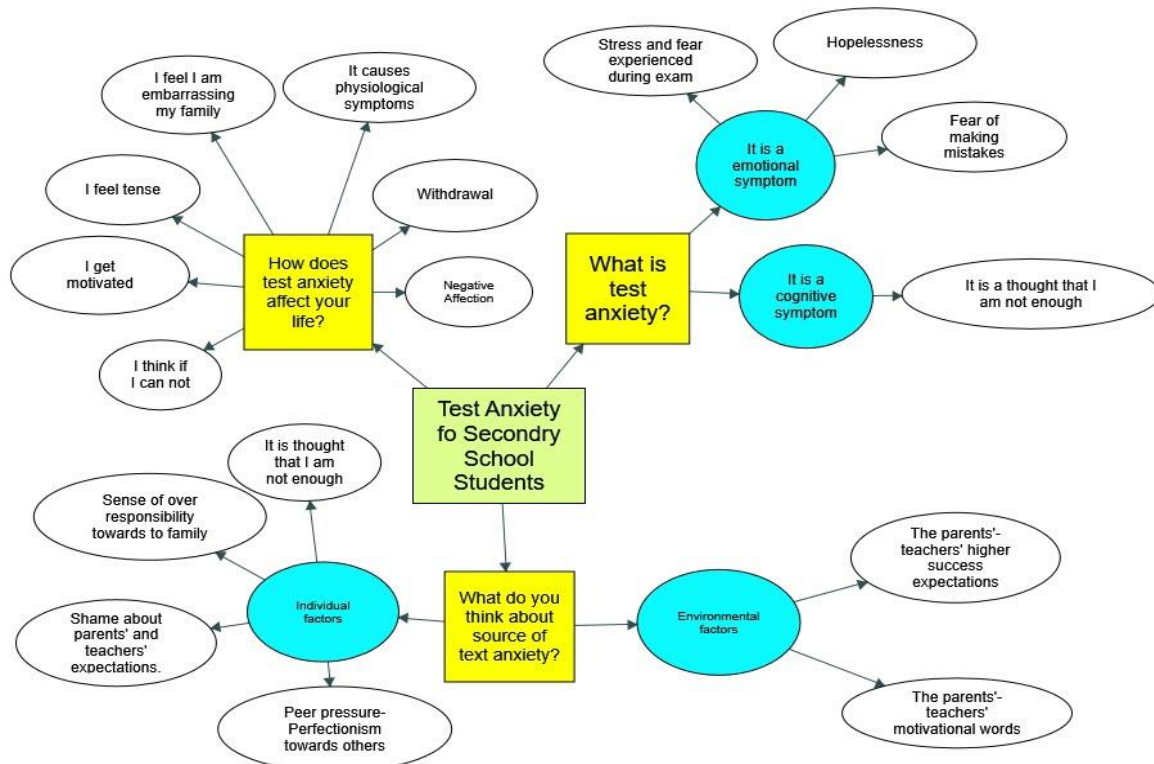


Figure 5. Test Anxiety of Secondary School Students

Secondary school students' opinions on test anxiety descriptions are given in Figure 6. As seen in the figure, the causes are gathered in two main themes: "It is an Emotional Symptom" (stress and fear experienced during exam, hopelessness, the fear of 'what if I cannot do it, fear of making mistakes" and "It is a Cognitive Symptom."

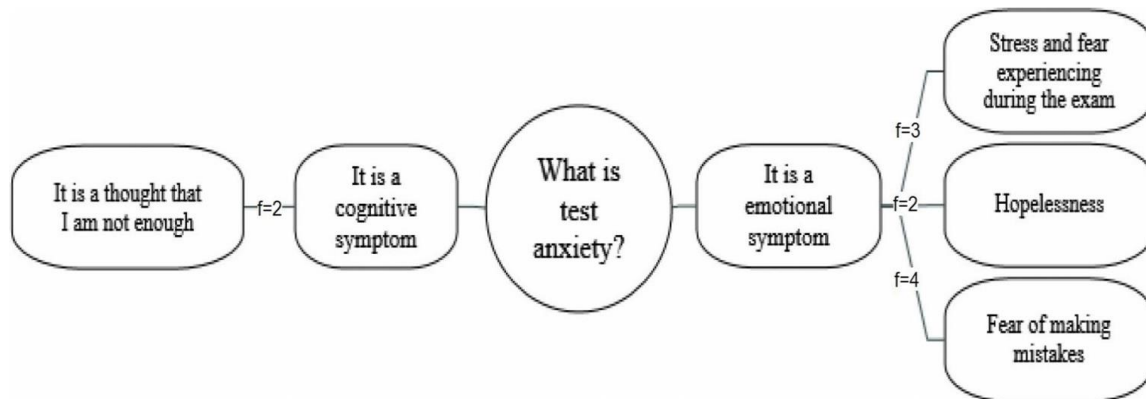


Figure 6. Secondary school students' descriptions of test anxiety

When comparing the two themes, we see that the students concentrated on the theme of "It is an Emotional Symptom." The most frequent subtheme in theme of "It is an Emotional Symptom" is "stress and fear experienced during exam." We can see the statements "It is a fear that I experience psychologically.", "Stressing extremely during or before the exam.", and "The stress and excitement I have in the exam." in the subtheme of stress and fear experienced during exam.

This subtheme is followed by the subthemes of "hopelessness" and "fear of making mistakes" in the theme of "It is an Emotional Symptom." In the subtheme of hopelessness, we can see the statements "I get hopeless and scared when I can't solve a question while studying and thinking what if I can't do it in the high school entrance exams." and "The moments when I feel hopeless." The statements "I feel excited in case I'll do it wrong in the exam." and "It is the fear of making mistakes during the exam." can be observed in the subtheme of fear of making mistakes. We can see the following statement in the final subtheme of the "It is an Emotional Symptom" theme which is the fear of what if I cannot do it: "The anxiety about solving the questions I know wrongly and the time won't be enough in the exam."

The second theme in which the secondary school students described test anxiety is "Physical Symptoms." This title was chosen because cognitive elements were observed rather in secondary school students' descriptions. Descriptions regarding the physical symptoms are given in Figure 4. We can see that one of the students described it with the statements: "We're competing with very good students. As we're in a long marathon, it is the anxiety whether I can't do it in case of anything." while another student provided the description "Failing to achieve what I'm aiming."

3.2.1.1 How does test anxiety affect your life?

As seen in Figure 7, secondary school students' opinions on how test anxiety affect their life were thematized as follows: "I feel I am embarrassing my family", "It causes physiological symptoms", "I feel tense", "Withdrawal", "I get motivated", "Negative affection" and "I think what if I cannot do it."

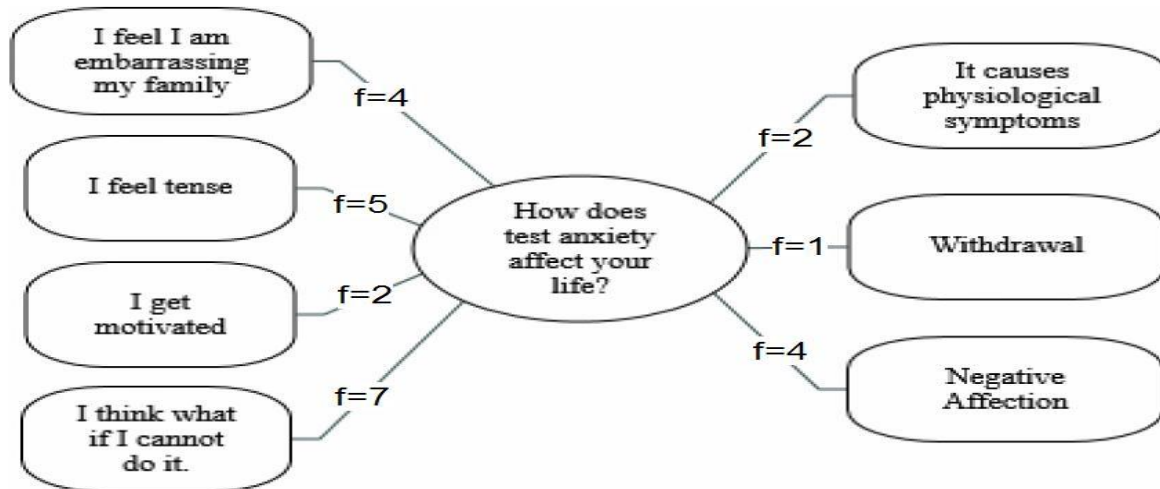


Figure 7. Secondary school students' opinions on how test anxiety affects their lives

We see that the answers to the question how test anxiety affects students' lives concentrate on "I think what if I cannot do it." The students presented the following opinions in the theme of "I think what if I cannot do it": "It makes me think what if I cannot do it and that I don't want to upset my parents.", "I thought 'what if I do it wrong, what if my parents get angry, can I not go to the school I want?' due to the stress I had", "It is stressful because I do my best and sometimes think if it's going to be alright.", "What if I cannot do it in the exam? I constantly have these fears.", "Others perform better in the exams, I get demoralized when I see them.", "You get anxious about what if you score low, whether you can go to a low-score high school?" and "I'm always studying because I can't do it."

In the second most frequent theme "I feel tense" following the before mentioned theme, we can see the statements "I feel tense thinking if they're not hopeful about me, they think I'll do many mistakes in the exam.", "I get very stressful when thinking if I do mistakes and my parents get angry, what if I can't go to the school I want.", "I get too stressed and give negative energy around me.", and "I become angry."

As for another theme "I feel I am embarrassing my parents", we can see the following student statements: "I feel stressed thinking if they're not hopeful about me, they think I'll do many mistakes in the exam.", "Get very stressful when thinking if I do mistakes and my parents get angry, what if I can't go to the school I want.", "It makes me think what if I cannot do it and that I don't want to upset my parents.", and "My parents tell me that they'll compare me to other kids. They want me to go to a good school, too, but what they do makes me more anxious." Another theme which is as frequent as the theme of "I feel I am embarrassing my parents" is the negative affection theme. We can see the statements "What if I cannot do it in the exam? I constantly have these fears.", "You get anxious about what if you score low, whether you can go to a low-score high school?", and "When you put so much effort in the exam, you can't help but feel a burden." in this theme. The remarkable point here is that the statement "I feel stressed thinking if they're not hopeful about me, they think I'll do many mistakes in the exam." was mentioned both in the S2= "I feel I am embarrassing my parents" and negative affection themes. The reason is that the part "if they're not hopeful about me, they think I'll do many mistakes in the exam" refers to the "I feel I am embarrassing my parents" theme with the part "I feel stressed" referring to the "negative affection" theme.

We can see the statements "I can't sleep because I'm afraid. My sleep pattern has been broken." and "I get watery eyes when I'm afraid, I can't see much." in the theme of "It causes physiological symptoms", the statement "I sometimes isolate myself from my friends without noticing it." in the theme of withdrawal, and the statements "If a student has an objective, this affects him positively and push him to study." and "I'm always studying because I can't do it." in the theme of "I get motivated."

3.2.1.2 What do you think about source of text anxiety?

Secondary school students' opinions on the causes underlying the test anxiety are given in Figure 8. As it is with the high school students, the causes are gathered in two main themes: Individual Factors (peer pressure - other-oriented perfectionism, sense of over-responsibility towards family, shame about parents' and teachers' expectations and it is a thought that I am not enough and Environmental Factors (parents'-teachers' motivational words parents'-teachers' higher expectations of success.).

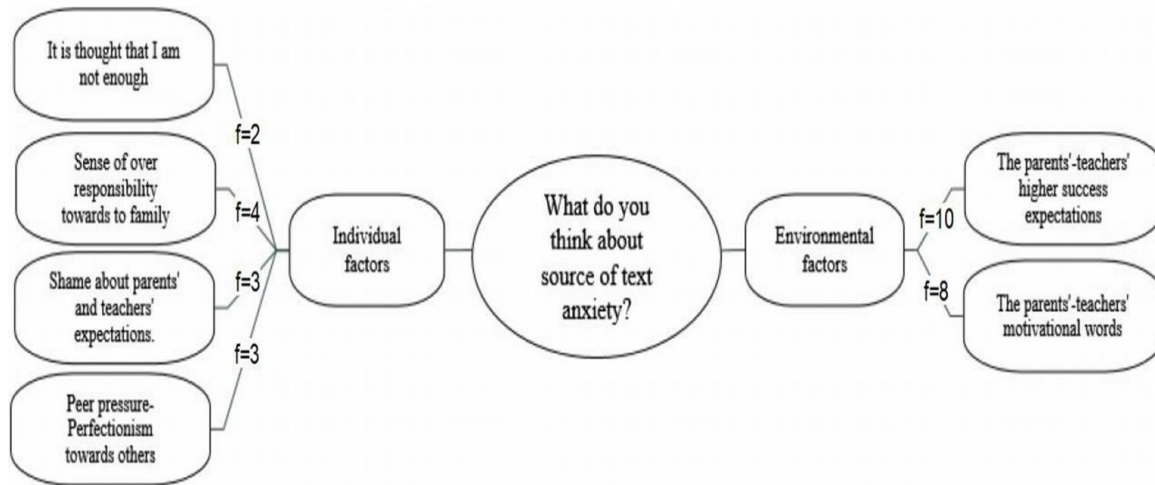


Figure 8. Secondary school students’ opinions on how test anxiety affects their lives

When comparing the two themes, we see that the students concentrated on the theme of “environmental factors.” The most frequent subtheme in theme of “environmental factors” is “parents’-teachers’ higher expectations of success.” We can see the following statements in this theme: “My family, teachers and even my social circle expect something from me. ‘You got the capacity, you can do it, you’re going to do it if you really study.’ I’m worried about whether I can’t meet these.”, “I don’t want to upset my parents and teachers, I want to meet their expectations.”, “My mother increases the anxiety. She’s always like ‘study, study, you’ll take the exam, you’ll take the exam’.”, “Parents pressure”, “They expect so much from us that they expect even more. They’ll get angry when we can’t do it.”, “Because everyone is anxious. Not only the student, but also the family thinks ‘what if our kid can’t study, go to a bad school, then what?’ The teacher thinks that, too.”, “We want to go to a good school, too, but our parents and teachers have high expectations and say that we must study.”, “Our teachers and families have high expectations, they tell us to study.”, “When they say ‘We expect this from you. You have to do it.’ I feel nervous in case I can’t meet their expectations.” and “If I can’t do it in the exam, I get anxious in case I’ll embarrass my teacher.”

The second most frequent subtheme is “parents’-teachers’ motivational words” in the theme of environmental factors. We can see the following student statements in this subtheme: “What my teachers say also makes me anxious.”, “Some of my teachers often say that we’d go to a bad high school if we couldn’t do it.”, “My teachers say ‘You’ll fall behind thousands of students with one false answer. Study accordingly and behave’”, “My family, teachers and even my social circle expect something from me. ‘You got the capacity, you can do it, you’re going to do it if you really study.’ I’m worried about whether I can’t meet these.”, “My teachers increase the anxiety like this: I get the impression whether I study less as they say others are very good.”, “My mother increases the anxiety. She’s always like ‘study, study, you’ll take the exam, you’ll take the exam’.”, “It’s also the warnings of some teachers. They’re saying, ‘You’ll have no time to breathe.’ Then, we think it’s not that serious. And we become more anxious.” and “My teacher discredited me for once or twice. Saying that I’d go to bad high schools. I’d thought whether I couldn’t do it.”.

When ranked in accordance with their frequencies in the theme of individual factors, “sense of over-responsibility toward family” is in the forefront. It is possible to observe the following statements in this theme: “I think I have responsibility toward my family.”, “I think I must be successful only for my family.”, “I feel like everyone would give up on me and I’d seem to be a bad student if I failed.” and “My family, teachers and even my social circle expect something from me. ‘You got the capacity, you can do it, you’re going to do it if you really study.’ I’m worried about whether I can’t meet these.” The statements “It causes anxiety when I think I’ll embarrass the teachers if I can’t do it.”, “I feel like everyone would give up on me and I’d seem to be a bad student if I failed.” and “My family, teachers and even my social circle expect something from me. ‘You got the capacity, you can do it, you’re going to do it if you really study.’ I’m worried about whether I can’t meet these.” can be observed in “shame about parents’-teachers’ expectations’ which is another subtheme of environmental factors. The following statements can be seen in

the subtheme of peer pressure - other-oriented perfectionism: “I sometimes know that I know and feel prepared in the exam, too, but we’re competing with such good people that there’s always a fear and unrest inside. It affects me so much we’re in a state of competition.”, “Getting ahead of many people, I mean, it’s very difficult.” and “You’re competing with many people and there’s the inevitable anxiety. If you lose one question, hundreds of people can get ahead of you.” For the final subtheme of the environmental factors which is the “thought that I am not enough”, it is possible to see the statements “If I know something is missing in what I know and I’m taking an exam, it makes me anxious in the exam.” and “I come to think that my grade will be low if I do it wrong.”

4. Discussion

It is seen according to the research findings that students’ descriptions of test anxiety differ between the two student groups. Cognitive symptoms are observed in both groups; however, it can be said that they were more emphasized by the high school students. Since statements like “It is a thought that...” were observed in high school students’ descriptions, such statements were thematized as “Cognitive Symptoms”. The statements including the cognitive symptoms are the thought that I will forget, the thought that I will not be successful, the thought that I am not enough, the thought that I will embarrass my family, lack of self-confidence, the thought of overestimating the exam, and the thought that I should do better. One can see that the high school students generally provided their automatic thoughts when describing the test anxiety. According to Beck (1976), whenever we have an unpleasant feeling, an automatic and extremely quick thought comes to our minds before this feeling. Beck called this automatic thought and regarded it the raw material of emotional problems. We can see that the statements used by the students describing the anxiety reflect automatic thoughts in accordance with this definition. Türkçapar (2012) argues that automatic thoughts are short and volatile by nature, and unlike our written or speech sentences, they are not long and not suitable for grammatical rules. When looking at the descriptions, we can see the answers given by the students are short sentences. Another cognitive structure that comes to mind is core beliefs and schema activation in consideration of the answers related to the test anxiety. In some resources, we can observe that concept of schema is used as being synonymous with concept of core belief. While some theoreticians include intermediate and core beliefs within the cognitive structure in the concept of schema to achieve easier comprehension, others address core beliefs as schema (Türkçapar, 2012). Schemas were handled as its form that covers intermediate and core beliefs in this schema. Intermediate beliefs refer to rules and premises relate to life whereas core beliefs may involve individuals’ understanding of anything continues in relation with how the individuals see themselves, others and world, which defines how they organize the personal and environmental information (Leahy, 2010; Türkçapar, 2012). We can say that the students experienced anxiety with the activation of the “hopelessness” schema which involves the lack of strength, success and performance. The hints related to past experiences that underlies the formation of these thoughts are observed in another finding of the study: “Parent and teacher attitudes” This finding is addressed in a more detailed way later in the discussion section.

As statements like “it is an emotion that...” was seen in the descriptions by the secondary school students, these statements were thematized as “Emotional Symptoms.” The statements involving the emotional symptoms focused on “stress and fear experienced in exam, hopelessness, and fear of making mistakes.” We can see that the secondary school students were rather emotion-focused when describing the test anxiety. It is known that high school groups go through more extensively designed test experiences with the differentiated content in addition to the test climate such as high school entrance exams, etc. during the secondary school. Hence, experience levels of secondary school students regarding tests/exams and being tested may be lower than the levels of high school students. Furthermore, how the secondary school students used emotions instead of thoughts to describe test anxiety was something anticipated in terms of development. Creed, Reisweber, and Beck (2011) suggest that this age group have difficulty in distinguishing between emotions and thoughts, and advise clinicians working with these age groups to utilize pictures and caricatures in case of difficulty in distinguishing between emotions and thoughts. As for the importance of emotions in regard to Cognitive Behavioral Therapy, emotions are the starting point of therapeutic interventions because clients go to counselling for the complaints about what they feel rather than what they think (Neenan & Dryden, 2015). In this case, if clients cannot access their emotions, counsellors/therapists cannot reveal their negative thoughts, either. In other words, cognitive therapy cannot be realized without revealing the cognitive reactions. From this point of view, it is seen that how the

secondary school students were aware of their emotions would facilitate intervention and prevention studies. It is also an advantage to motivate students to participate in prevention or intervention studies based on their emotions.

Given the answers provided by the secondary school students to the question “How does test anxiety affect your life?” cognitive model was confirmed once again within the context of this research. Test anxiety (event) causes the thought that what if I cannot do it and that I will embarrass my parents (belief); these thoughts lead to negative affection (emotion) which causes the students to feel tense and physiological symptoms (physiology), therefore eventually causing withdrawal in terms of behaviour (action). It is possible to say that the cross-sectional model exists among the high school students. Test anxiety (event) causes the thought that it affects the preparation and one cannot get prepared enough (belief); these thoughts lead to negative affection (emotion) which consequently causes withdrawal in terms of behaviour and problem in family relations (action). It can be observed that the physiological element is missing in the model of the high school students. What is the benefit of cognitive model? Clients benefit from cognitive model in two ways: The first one make them step back from their unsettling thoughts and emotions, which ensures a more objective examination of them and the second one enables the relationship among emotion, thought, physiology, and behaviour to be more concrete, vivid and apprehensible (Neenan & Dryden, 2015). Moreover, this simple model, if it is remembered, could help us comprehend many challenges and make alterations later (Foreman & Pollard, 2011).

We can find what triggers automatic thoughts of the secondary and high school students in the answer to the question “What do you think about source of text anxiety?” An important source of test anxiety that we come across with both high school and secondary school students is the high expectation of success. This expectation comes from both teachers and parents. According to Van de Vijver and Leung (2000), parental effect on success is a factor specific to Eastern societies. In the cross-cultural study conducted by Bodas and Ollendick (2005) on test anxiety, it was found that Indian students’ shame about parents’ expectations and parents’ high expectation of success were more effective on test anxiety compared to the American students. In another study, 66% of the students stated that they experience parental pressure (Deb, Strodl, & Sun, 2015). Menon (2013) found in the study conducted with adolescents that homework is a crucial source of anxiety. It was also observed in that study how students do not receive feedback from their teachers, teachers’ pressure about future and parents’ comparison of adolescents and their peers were important stress sources. We can see that parents’ and teachers’ motivational words have a negative rather than positive impact on both high school and secondary school students due to their high expectations of success. For instance, the fact that parents’ daily talks about exams or the sentences “We count on you”, “you’re a hardworking student, why did you score low?” or “You have the capacity, you can do it”, much as they are uttered with good intentions and for encouragement, make a reverse impression on students, causing the test anxiety. It is known that students are highly sensitive due to the developmental period they are going through. This is the reason why these quite reasonable statements are perceived by students as being judging and blaming. This sensitivity causes students to make the following assumptions: 1) I should be as successful as my peers and 2) I cannot embarrass my parents and teachers. Students find themselves insufficient or unprepared/being not able to prepare because of these statements. At the end of this process, they live to regret thinking that they cannot study enough and perform highly enough.

Within the context of this research’s important results, it is seen that the secondary school students were internal locus of control and mostly referred the anxiety to themselves in their descriptions of test anxiety and its sources. The aspect of time was also in the forefront and “during the exam” was emphasized in their descriptions of test anxiety. It was observed that they used especially the concepts of stress, fear, and worry regarding “during the exam.” It can be inferred that the high school students were rather external locus of control in their descriptions. The anxiety elements include students’ perceived peer pressure and their comparison of themselves and peers. How they take the success of their peers as the criterion of their success is the evidence of the case.

We can see in the study performed by Cassady and Johnson (2002) that higher cognitive test anxiety caused lower academic performance and 7% to 8% of students’ performance in exams were explained by cognitive test anxiety. Test anxiety’s effect on low success is explained by Naveh-Benjamin (1991) as follows: Anxiety experienced during the preparation for a test may cause preparation to be conceptualized and regulated improperly and the ability to remember important information during the test to be limited (Naveh-Benjamin, 1991). According to Hembree (1988), test anxiety is directly related to low studying

skills. Students who think that test anxiety affects their performances and preparations lose self-confidence and students who lose their beliefs in their ability to prepare stop studying with the thought that they cannot be successful no matter what. Consequently, they may not exhibit the performance they expect in exams.

If we examine the intervention studies on test anxiety, we can see that interventions and preventive studies are mostly on students only (Can, Dereboy & Eskin, 2012; Carter et al., 2005; Erwin-Grabner, Goodill, Hill, & Von Neida, 1999; Lang & Lang, 2010; Larson, El Ramahi, Conn, Estes, & Ghibellini, 2010; Onwuegbuzie & Daley, 1996; Serrano Pintado, Delgado Sánchez-Mateos, & Escolar-Llamazares, 2016; Weems et al., 2009; Yahav & Cohen, 2008; Zinta, 2008). Yet, it can be understood from the research result that the phenomenon of test anxiety is not just related to students. It is seen that parents and teacher can also be the sources of test anxiety. Indeed, the secondary school students used the words parents and teachers together constantly and did not mention them separately. In consideration of the process, test anxiety is not only the problem of students but also parents and teachers play a key role. No matter how some of the students regarded the cause of anxiety as overestimation of the exam, verbal and non-verbal messages of teachers and parents are effective in the formation of anxiety, too.

5. Recommendations

It is thought that the same interventions would not be appropriate for both groups if the construct of their anxiety was assumed to be the same and cognitive interventions with high school students would be more proper as cognitive elements were observed more frequently in the statements of the high school students. When considering from this perspective, it is suggested that it would be more appropriate to train this group in skills of emotion regulation due to the dominance of emotional elements in the secondary school students' statements.

Yet, it is understood that the parents'-teachers' attitudes are the common ground for both groups. It is thought that intervention and prevention studies for test anxiety would be useful if they were conducted within the context of both students and parents/teachers. Test anxiety seems to be a phenomenon which is not only the problem of students but also needs to be studied as a whole.

Since the research essentially focused on the source(s) of test anxiety, the intermediate beliefs of the automatic thoughts which were stated by the high school students when describing the test anxiety in accordance with the cognitive model could not be identified. It is therefore suggested that in-depth and extensive examination of test anxiety will contribute to practitioners and researchers in the comprehension of test anxiety and in the interventions along with the identification of intermediate beliefs.

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