

NATURE, SEVERITY AND ORIGINS OF FEARS AMONG  
CHILDREN AND ADOLESCENTS WITH RESPECT TO AGE,  
GENDER AND SOCIOECONOMIC STATUS

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**I hereby declare that all information in this document has been obtained and presented in accordance with academic rules and ethical conduct. I also declare that, as required by these rules and conduct, I have fully cited and referenced all material and results that are not original to this work.**

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## ABSTRACT

### NATURE, SEVERITY AND ORIGINS OF FEARS AMONG CHILDREN AND ADOLESCENTS WITH RESPECT TO AGE, GENDER AND SOCIOECONOMIC STATUS

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The present study aimed to investigate the fears of female and male children and adolescents between the ages of 8 and 18 from different socioeconomic levels. Additionally, the origins of children's and adolescents' fears were examined.

To reach the aims, the study was divided into two stages. In the first stage adaptation study of Fear Survey Schedule for Children-AM (Burnham, 1995) into Turkish was conducted. Two different samples were utilized in stage one. First sample was comprised of 355 participants (173 females and 182 males) with a mean age of 12.66 ( $SD=3.05$ ). Second sample was comprised of 1315 participants (642 females and 673 males) with a mean age of 13.15 ( $SD=3.18$ ). Second stage of the study was the main study. Second sample of the first stage including 1315 participants was utilized in stage two.

Beside Fear Survey Schedule for Children, assessing the origins of children's and adolescents' fears were utilized in the present study.

Results of the study pointed that female children from low socioeconomic status at age 8 were the most fearful group among all children and adolescents. Also, for all fear factors female children and especially from low socioeconomic status reported higher level of fear than male preadolescents and adolescents. In general, it can be said that being female, from low socioeconomic status and young especially at age 8 is related to more intense fears. Among all children and adolescents, fears of children at age 8, 9 and 10 were significantly different than fears of preadolescents and adolescents at various ages, but they were not significantly different than each other. Fears of preadolescents at age 11, 12 and 13 were significantly different than preadolescents at least 2 years older than themselves. Overall most commonly endorsed fears were "someone in my family dying", "going to Hell", "death of a closed person (grandparent, best friend etc.)", "abuse", "God", "AIDS", "someone in my family having an accident", "my parents separating or getting divorced" and "terrorist attacks".

Findings related to the origins of children's and adolescents' fears indicated that 64.8% of all children learnt fear by modeling, 51.8% of all children learnt fear by negative information transmission and 35.8% all of children fear by experiences (conditioning). Negative information transmission intensified 45.7% of all children and adolescents, modeling intensified 49% of all children and adolescents and experience (conditioning) intensified 44.8% of all children and adolescents.

Keywords: Children, adolescents, fear intensity, fear frequency, fear content.

## ÖZ

### TÜRKİYE'DEKİ ÇOCUK VE ERGENLERİN KORKULARININ ŞİDDETİ, NİTELİĞİ VE KAYNAKLARI

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Bu çalışmada Türkiye'de yaşayan 8-18 yaşları arasında farklı sosyoekonomik düzeyden gelen kız ve erkek çocuk ve ergenlerin korkularının incelenmesi amaçlanmaktadır. Ek olarak, çocuk ve ergenlerin korkularının kaynakları araştırılmıştır.

Amacına ulaşabilmesi için, çalışma iki aşamaya ayrılmıştır. Birinci aşamada Fear Survey Schedule for Children- AM (Burnham, 1995) adlı ölçeğin Türkçe'ye uyarlanması çalışması yürütülmüştür. Birinci aşamada, iki farklı örneklem kullanılmıştır. Birincisi yaş ortalamaları 12.66 ( $SD=3.05$ ) olan 355 katılımcıdan (173 kız ve 182 erkek) oluşmaktadır. İkincisi ise, yaş ortalamaları 13.15 ( $SD=3.18$ ) olan 1315 katılımcıdan (642 kız ve 673 erkek) oluşmaktadır. Çalışmanın ikinci aşaması ana çalışmadır. İkinci aşamanın örneklemini, birinci çalışmanın 1315 katılımcı içeren ikinci örneklemini oluşturmaktadır. Çalışmada Çocuklar için Korku Ölçeği'nin dışında, çocukların ve ergenlerin korku kaynaklarını değerlendiren sorular da sorulmuştur.

Çalışmanın sonuçları, düşük sosyoekonomik düzeyden gelen 8 yaşındaki kız çocuklar tüm çocuklar içinde en çok korkan gruptur. Ayrıca, korkunun bütün korku faktörleri için özellikle alt sosyoekonomik düzeyden gelen kız çocuklarının korku düzeyleri, erkek ergenlerden daha yüksektir. Genel olarak, kız olmanın, düşük sosyoekonomik düzeyden gelmenin ve yaşı küçük olmanın özellikle de 8 yaşında olmanın daha yoğun korku düzeyine sebep olduğu söylenebilir. Bütün çocuklar ve ergenler içinde 8, 9 ve 10 yaşındaki çocukların korkuları değişik yaşlardaki ergenlerin korkularından anlamlı düzeyde yüksek çıkmıştır, fakat bunlar birbirlerinden farklılıkları anlamlı değildir. 11, 12 ve 13 yaşındaki ergenlerin korkuları kendilerinden en az 2 yaş büyük olanlardan anlamlı düzeyde farklıdır.

Tüm çocuklar tarafından en çok tekrarlanan korkular “ailemden birinin ölmesi”, “cehenneme gitmek”, “yakınım olan birinin ölmesi”, “taciz”, “Allah/Tanrı”, “AIDS”, “ailemden birinin kaza geçirmesi”, “anne-babamın ayrılması” ve “terörist saldırıları”dır.

Çocukların korkularının kaynaklarıyla ilgili sonuçlar, çocuk ve ergenlerin % 64,8'nin model alma yoluyla, %51,8'nin olumsuz bilgi iletimi yoluyla, %35,8'nin koşullanma yoluyla korkuyu edindiklerini göstermiştir. Çocuk ve ergenlerin %45,7'sinin korkuları olumsuz bilgi iletimi yoluyla, %49'nun korkuları model alma yoluyla ve %44,8'nin korkuları koşullanma yoluyla yoğunlaşıyor.

Anahtar Kelimeler: Çocuklar, ergenler, korku yoğunluğu, korku sıklığı, korkunun içeriği

*To my love Deniz Yıldız and to my baby*

*&*

*To my parents, Betül Serim*

*and*

*Zeki Serim*

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## **CHAPTER I**

### **INTRODUCTION**

#### **1.1 Background of the Study**

The main aim of this study was to examine fears of children and adolescents living in Turkey with regard to age, gender and socioeconomic status to discuss the origins of their fears. In order to have opportunity to compare age, gender and socioeconomic status female and male children and adolescents between ages of 8 to 18 from low and middle socioeconomic status were attended to the study.

Fear, especially fears of children and adolescences attract researchers' attention from early years to today. First research on fear was published by Hall more than one century ago, in 1897. In his study, it is clearly suggested that fear is "a normal human condition, necessary to motivate learning and to protect self from danger". As a normal part of development, fear is an adaptive response to possible imaginary or real danger (Gullone, 1999; 2000). Many theorists from early years defined fear as a normal, basic and an expected reaction to a "real or imagined threat" (King, Hamilton, & Ollendick, 1988; Gullone & King, 1992, 1993). Hall (1897) suggested that fear motivates learning and protects from danger, on the other hand, Lazarus (1991) considered that although fear motivates to protect ourselves from danger, fear may also affect memory, perceptions, problem-solving abilities, social interactions and sense of self negatively.

Fear is an adaptive emotion and normal part of development. Anxiety is similar to fear, but the reason behind the fear can be defined more clearly. Anxious individuals are generally uneasy and have feeling of something to be negative although they cannot identify danger or danger source. Phobias are different than anxiety and fears. Phobic individuals show excessively severe reactions to stimuli, cannot suppress it although they are aware of the irrationality of their behaviors. Phobias intervene with the individuals daily functioning (Sungur, 1997).

Every individual has fears, but normality of fear is determined by several factors, according to whether or not the fear is appropriate to age or stage, the individual persist over the same fear a long period of time, and the fear effects daily functioning negatively. If the individual is fixated in previous developmental stage in terms of expressed fear, persist on the same fear over an extended time or the expressed fear effects the daily life of the individual negatively it is defined as clinical fear (Gullone,1996).

The focus of research generally has been on the examination of children's fears regarding to content, intensity and frequency and demographic variables (Burnham, 1995, 2005; Gullone, 1999; Gullone & King, 1992, 1993). Some of the common demographic variables are age (Campbell, 1986; Ollendick 1983; Gullone & King, 1992, 1993; Burnham, 1995; Burnham & Gullone, 1997; Bauer, 1976; Lane and Gullone, 1999), gender (Jersild & Holmes, 1935; Bauer, 1976; Burnham & Gullone, 1997; Shore & Rapport, 1998), socioeconomic status (SES) (Sidana, 1975; Erol & Şahin, 1995; Cooley- Quille, Boyd, Frantz & Walsh, 2001; Graziano, 1971; Meltzer, Vostanis, Dogra, Doos, Ford & Goodman, 2008) and culture (Ingman, Ollendick & Akande, 1999; Erol & Şahin, 1995; Dhiranetra, 1972; Shore & Rapport, 1998; Dong, Yang & Ollendick, 1994). In addition to age, gender, socioeconomic status and culture the affect of negative life

experiences such as earthquakes, terrorist attacks etc. and although there is little evidence genetic factors were examined (Burnham, 2007; Burnham & Hooper, 2008; Karairmak & Aydın, 2008; Stevenson, Batten, Cherner, 1992). Also studies examining the fear content, intensity and frequency of special populations, such as gifted, mentally retarded, hearing impaired, seeing impaired and physically handicapped children and adolescents were conducted (Vanderberg, 1993; Tippey & Burnham, 2009; King, Gullone & Ollendick, 1990).

Age is an important factor explaining the differences between the fears of children and adolescents with the same gender. The intensity and frequency of fears decrease with increasing age and the scores of youngest age group is the highest for overall fear scores and for scores of different fear types (Bauer, 1976; Gullone & King, 1993; Lane & Gullone, 1999; Burnham, 2005). Fear frequency of imaginary themes including fears of ghosts and monsters, bedtime fears, frightening dreams decreases with the increase of grade level, while realistic fears including fears of bodily injuries and physical danger increase (Bauer, 1976). Fear of dark, noise, imaginary and supernatural things and specific types of people were more common among younger children while fear of illness and enclosed places were more common among older children (Burnham, 2005). The change in the fears of children and adolescences with increasing age is expressed by cognitive and social development. Especially the developing perception about the reality and transition to egocentric behavior to cause and effect perception described by Piaget (1955; 1962) have a determining role on the age differences between the fears of children. Older children have more realistic fears than youngsters related to their developing perceptions about the world.

Gender is another important factor in examining different fear types. Most of the research studies suggested that female children and adolescents are more fearful than males for overall fear scores and for different fear types with the same age (Lane & Gullone, 1999, Burnham, 2005). Gender-role stereotyping is indicated as an important reason of the difference between the fears of boys and girls. Lane and Gullone (1999) clarified it as male children and adolescents have difficulty in expressing their fears when they are together with their friends. So it does not mean that gender differences in fears of children and adolescents indicate females are more fearful. This is very much related with the gender role expectations and acceptability of fearful behavior by girls and boys.

Socioeconomic status of children is social component of children's fear like the gender (Graziano, 1971). Even the oldest research studies conducted about the effect of socioeconomic status on fear suggested that children's perceptions about their environment has role on the development of fear. Nearly all of the studies indicated that children from low socioeconomic status have fear of death, violence, animals and strangers because they perceive the environment as dangerous and enemy. Children from middle or upper SES have fears of illness, transportation vehicles and pet's safety (Angelino, Dolling & Mech, 1956; Jersild & Holmes, 1935; Meltzer, Vostanis, Dogra, Doos, Ford & Goodman; 2008).

As well as gender, age and socioeconomic status, fears of children and adolescents differ from culture to culture. Many research studies have been conducted with Mexican, European, Hispanic, Hawaiian, Asian and African children and adolescents to discuss whether fear content, intensity and frequency differ among different cultures or not (Varela, Sanches- Sosa, Biggs & Luis, 2007; Shore & Rapport, 1998; Burnham & Lomax, 2009). Most striking results were about the fears of White and African children.

Studies suggested that African children were more fearful than Whites, especially for Fear of Death and Danger scores (Ollendick, Yang, King, Dong & Akande, 1996; Burnham, Schafer & Giesen, 2006).

Similar to culture, negative events such as natural disasters and terrorist attacks have role on the difference between the children's fears from different communities. When compared, children who were victims of earthquakes with non-victim children, not surprisingly fear of death scores of victim children were higher than non victim children (Kararmak & Aydın, 2008). Children who had experience about terrorist attacks directly or indirectly (by television) have higher scores of fears in terms of intensity and frequency (Burnham, 2007; Burnham & Hooper, 2008; Muris, Mayer, van Eijk & Dongen, 2008).

Many research studies focus on the origins of fear. Gullone and King (1993) suggested a cognitive-developmental model, as well as prepotency and preparedness factors. They mentioned about the change of children's fears depending on the developmental levels and life experiences, such as mostly infants have fear of strangers and separation where as school aged children have fears of criticism and failure.

Rachman (1977, 1991) suggested a straightforward model discussing the role of learning experiences in the acquisition of fears and phobias. According to three-pathways theory, beside the (1) classical conditioning, in other words direct experiences with fearful things or events, (2) modeling which is related to vicarious learning and (3) negative information transmission which means exposure to negative information about the fearful thing or event have role on the development of fear. Many research studies were conducted based on the three-pathways theory (Ollendick, 1983; (King, Clowes-Hollins, & Ollendick, 1997; Merckelbach, Muris, & Schouten, 1996 ; Graham & Gaffan, 1997). Generally, children, parents and

teachers were asked how children's fear acquisition occurred, by experience, modeling or negative information transmission. The most common way of fear acquisition is negative information transmission (89%). Modeling (56%) and conditioning (36%) follow negative information transmission (Ollendick and King, 1991). Muris, Merckelbach, and Collaris (1997) followed a more extended method to find out what extent the reported conditioning, modeling, and negative information experiences had played a role in the increase of the fear intensity of common childhood fears. Different than previous studies they found that 75.3 % of children learn fears by modeling, 67.4% learn by negative information transmission and 49.4% learn by conditioning. It was reported that conditioning intensify fear most (45.2%) and negative information (35.1%) and modeling (3.8%) followed conditioning.

In Turkey, limited studies on fears of children and adolescents were conducted. In an early study, Fear Survey Schedule for Children was adapted into Turkish by Erol, Şahin and Özcebe in 1990 with children between the ages of 8 and 12. That version of the survey was 110 itemed and 5 point Likert scale. As it was mentioned before, studies with FSSC have been conducted since 1968 in different countries of the world. Some studies conducted with revised version of FSSC. The reason behind revising the scale was to examine contemporary fears of children. Many research studies (e.g., Muris & Ollendick, 2002; Burnham, 2009) indicated that through global events such as trauma, disasters, wars, diseases etc, television and media exposure and societal changes fear content of children and adolescents have changed. So fears of Turkish children should be examined after modernization and natural and man-made disasters such as earthquake in 1999 and terrorist attacks. As it was mentioned before fears of Turkish children was examined in 1990 and since then many changes occurred in Turkish children's lives in 20 years. Contemporary fears of

Turkish children should have been examined with new items related to changes occurred in their lives.

Another measurement tool, Fear Experiences Questionnaire (FEQ) was adapted into Turkish by Atılgan, Saçkes, Yurdugül and Çırak (2007). It is used for assessing fear responses of adolescents between the ages 12 and 17. FEQ is a 21 itemed scale and assess the fear experiences of children not the stimuli. For that reason FEQ is not adequate to define fears of children. Fear Survey Schedule for Children is a 123 itemed tool to measure fear content, frequency and intensity of children. By this way in current study, fear content, frequency and intensity of children and adolescents were examined in detail.

So far, research studies examining the fears of children and adolescents with regard to age, gender and such demographic factors and also studies assessing the relationship of fear to other emotions were conducted in different countries of the world. Similarly, in 1990 a study assessing fears of children between the ages of 8 and 12 was conducted in Turkey. As it was mentioned above, fear is related with anxiety and phobias (Pfefferbaum et al., 1999; Terr et al., 1999; Pine & Cohen, 2002; Squires, 2002). Fear is an adaptive emotion where as anxiety and phobias intervene with daily life. So fear should be under control of educators and psychological counselors through monitoring. In this way, fear content, intensity and frequency of children and adolescents should have been analyzed in detail. By same token, origins of children's and adolescents' fears should have been taken into consideration.

The major aim of the present study was to investigate the fears of children and adolescents living in Turkey with regard to age, gender and socioeconomic status and to define the origins of their fears. For the present sample, age, grade, gender of the participants and occupations, work places

and education levels of mothers and fathers of participants were examined to obtain the descriptive characteristics of children and adolescents attending to the study. Second, in order to inspect fears of children and adolescents, the content, intensity and frequency of their fears were examined. Finally, origins of their fears were defined and whether these origins have role on the increase of their fears were checked.

## **1.2. Purpose of the Study**

The main purpose of the study is to investigate content, intensity and frequency of children's and adolescents' fear living in Turkey. Secondary goal of the study is to identify the origins of children's and adolescents' fears according to three-pathway theory of children's fear acquisition. To achieve this goal, two phases were followed. In the first phase, the reliability and validity of a new version of Fear Survey Schedule for Children-American was examined to confirm it's applicability to Turkish children and adolescents. In the second phase of the study, content, intensity, frequency and origins of children's fear living in Turkey were investigated with regard to age, gender and socioeconomic status.

## **1.3. Research Questions**

The overall aim of the current study is to define the content, intensity, frequency and the origins of children's fears living in Turkey. To reach this aim before the main study, answer of the following question was investigated;

Research Questions:

- 1) Is Turkish version of Fear Survey Schedule for Children a valid and reliable instrument with Turkish children and adolescent sample?

- 2) Is there any difference between different gender, age and socioeconomic status groups in terms of Five Fear Factors, in fear intensity scores?

More specifically;

- a) Are there gender differences between female and male children and adolescents from low and middle socioeconomic status living in Turkey, ages 8-18, in fear intensity scores?
  - b) Are there age differences between female and male children and adolescents from low and middle socioeconomic status living in Turkey, ages 8-18, in fear intensity scores?
  - c) Are there socioeconomic status differences between female and male children and adolescents from low and middle socioeconomic status living in Turkey, ages 8-18, in fear intensity scores?
- 3) What are the most common fears endorsed by female and male children and adolescents between the ages 8 and 18 from low and middle socioeconomic status living in Turkey?
  - 4) What are the origins of children's fears living in Turkey?
  - 5) Are the origins of the children's and adolescents' fears intensifying their fears?

#### **1.4. Definitions of the Terms**

**Fear:** "A normal reaction to a real or imagined threat, is seen as integral part of development" (Gullone & King, 1993, p.137)

### **1.5. Significance of the Study**

The significance of the present study comes from two sources; the implications of the findings in terms of counseling and education purposes, and in terms of research purposes.

At the beginning, the study examined the fears of children and adolescents with such a large age range and with new added items first time in Turkey. Fear is important on healthy physical, emotional and psychosocial development of children because fear protects from danger, but on the other hand there is a strong relationship between fear and anxiety (Pfefferbaum et al., 1999; Terr et al., 1999; Pine & Cohen, 2002; Squires, 2002). As for counseling and educational purposes, through this study the content, frequency, intensity and origins of children's and adolescents' fear living in Turkey can be screened and assessed by counselors and educators. The knowledge can be shared with parents, children and adolescents. Training programs that aim to teach parents and educators prevention strategies can be developed. Children and adolescents can be educated about controlling their fears before the transition to anxiety or phobias.

As for research purposes, this study is the first in Turkey that Fear Survey Schedule for Children (FSSC) was used as a tool to examine content, intensity and frequency of children and adolescents with contemporary items between the ages of 8 and 18. In 1990, 20 years before fears of children between the ages of 8 and 12 in Turkey was examined, but as it was mentioned before results related to the fears of children and adolescents in Turkey should be updated. Previously Fear Survey Schedule for Children was used in different countries of the world such as China, America, Hawaii and Australia. This will contribute to the cross-cultural applicability of the survey. In addition by the translation of Fear Survey Schedule for Children

and examination of its psychometric properties, a new instrument was introduced to the Turkish literature.

## **CHAPTER II**

### **REVIEW OF THE LITERATURE**

In this chapter, the literature on the nature and the origins of fear are presented. More specifically, first section explains the (a) definition and classification of fear, (b) relationship of fear to anxiety, phobia, worry and depression, (c) fear assessment techniques, (d) the relationship of fear to demographic and genetic factors and the second section explains the origins of fears.

#### **2.1. Definition and Nature of Fear**

Similar with the other emotions such as anger, happiness and sadness, fear has been the interest of many research studies. In order to understand the nature of fear and to separate normal fear than abnormal, fear studies have been conducted since late 1800s. More than one century ago research study on fear by G. Stanley Hall (1897) was published and it was suggested that normal fear is an adaptive reaction to a real or imagined threat. Many different descriptions were given for fear in the literature. Urdang and Flexner (1988) defined fear as “a distressing emotion aroused by an impending pain, danger, or evil or by the illusion of such”. In general, fear is defined as a normal and integral part of development and normal response to danger. There is a survival value of fear since it warns against danger and motivates to escape or avoidance (Shore & Rapport, 1998; Gullone, 1999; 2000). Although fear is an adaptive emotion and motivates learning, it was suggested that fear has a limiting effect on memory by reducing the capacity

of brain to store and process information, on perceptions, on problem solving abilities and on learning in general (Lazarous, 1991; Hamilton & Mackie, 1993; Bodenhasen, 1993). Also, fear may damage social interactions and sense of self (Garber & Dodge, 1991).

From very early studies to more recent ones fear has been classified differently, because studies were conducted with different groups in terms of demographic characteristics and in different years. Also different versions of the surveys were used, for example for specific research studies specific items were added. Jersild and Holmes (1935) classified fear as concrete events (animals, strange people etc.), losses (failure, death etc.) and imaginative fears (supernatural, darkness etc.). Although basic fear patterns were similar current studies classify fear in different way. Ollendick (2002) suggested 7 components of fear including fear of death and danger, aversive social fears, fear of unknown, animal fears, medical and situational fears, school performance fears and anticipatory social fears. Differently, Burnham (2005) suggested 5 components of fear with an exploratory factor analysis including fear of death and danger, fear of unknown, fear of school and social stress, fear of animals and fear of criticism/ failure.

### **2.1.1. Relationship of Fear to Other Emotions**

Fear, anxiety and phobia are employed interchangeably in many research studies (e.g. Colder, Lochman & Wells, 1997; Kindt, Bierman & Brosschot, 1997), but fear, anxiety and phobia are different than each other. Fear and anxiety are very similar, but mainly fear is a conscious reaction against the danger while anxious individuals cannot identify why they are uneasy and have feeling of something bad will happen. Rachman (1998) compared fear and anxiety in detail. He suggested that source of threat was one of the most important differences between fear and anxiety. A specific source of threat can be identified for feared individual, while there is an elusive source of

threat for anxious individuals. Fear and anxiety differ in terms of onset, duration and offset. Anxiety is uncertain and prolonged while fear is detectable and episodic in nature. Removal of the threat decreases fear, but anxious individuals are vigilant although there is not a threat. Phobias are much more different than fear and anxiety. Phobic individuals show severe and inappropriate reactions to stimuli and they are unable to control their reactions although they are aware of irrationality of it (Fisher, Shaefer, Watkins, Worrell & Hall, 2006; Sungur, 1997). In general Miller, Barrett and Hampe (1974) suggested a way to differentiate normal fear from abnormal fear. If the individual have a fear specific to his/her age and stage, the fear do not continue long time in other words the individual do not persist the fear over a long period of time and fear do not interfere with daily functioning it can be called as “normal fear”.

Many research studies have been conducted to examine the relationship of fear to anxiety, phobia, worry and depression (e.g., Gilbert-Macleod, 2000). Last, Francis and Strauss (1989) administered Fear Survey Schedule for Children- Revised to 111 children and adolescents meeting DSM-III criteria for separation anxiety, overanxious disorder and phobic disorder. Results indicated that children with separation anxiety disorder have fear of “getting lost” (47.7%), children with overanxious disorder have fear of “being criticized” (45.5%), “being teased” (36.4%) and making mistakes (33.3%) and children with school phobia have fear of “going to school” (47.1%).

Ollendick, Yule and Ollier (1991) conducted a study with 327 children between the ages 8 and 10. Fear Survey Schedule for Children- Revised (FSSC-R), Revised Child Manifest Anxiety Scale (RCMAS) and Children’s Depression Inventory (CDI) were applied to children to examine the relationship of fear to anxiety and depression. Results indicated no relationship between fear and depression ( $r = .31$ ) but, a high correlation

between fear and anxiety ( $r = .64$ ) was revealed. Similarly, King, Gullone and Ollendick (1992) applied FSSC and RCMAS to 1524 Australian children between the ages 8 and 16. The correlation between FSSC-R and RCMAS was found .53 meaning that there is a relationship between fear and anxiety. As it was mentioned before to examine relationship of fear to anxiety many research studies were conducted with different surveys.

Different than previous studies Carroll and Ryan-Wenger (1999) used children's drawings to explain the relationship of fear to anxiety. The nonparametric correlational statistics, the eta was used and it was reported that subscales of anxiety; worry anxiety (.40), social anxiety (.32) and physiological anxiety (.39) were correlated with the number of fears reflected in children's drawings.

More recent studies were conducted on the same issue. Muris and Ollendick (2002) applied Fear Survey Schedule for Children –Hawaii (FSSC- HI), Spence Children's Anxiety Scale (SCAS) and State- Trait Anxiety Inventory for Children (STAIC) with 551 adolescents from Belgium. Findings concluded relationship of fear to trait anxiety and anxiety disorders symptoms. Fear of Failure and Criticism ( $r = .77$  and  $r = .59$ ), Aversive Social Fears ( $r = .64$  and  $r = .50$ ), and Anticipatory Social Fears ( $r = .75$  and  $r = .58$ ) were strongly connected with Social Phobia and Generalized Anxiety, respectively. Fear of Unknown ( $r = .66$ ) was associated with Separation Anxiety. As well as anxiety, worry, too has been interest of research studies to investigate the relationship to fear.

Laing, Fernyhough, Turner and Friesston (2009) interviewed with 142 children in four age groups; 7-8 years, 10-11 years, 13-14 years and 15-16 years from North- East England. Findings concluded correlation between fear and worry for ages 7-8 ( $r = .62$ ), 10-11 ( $r = .58$ ), 13-14 ( $r = .58$ ) and 15-16 ( $r = .69$ ).

As a result, studies examining the relationship of fear to anxiety, phobia, worry and depression suggest that there is a strong relationship of fear to anxiety and phobia. As it was mentioned above, there is a correlation between assessment tools for fear, anxiety and phobia, meaning that anxious or phobic individuals have tendency to have fears of similar issues. For example children with school phobia have fear of going to school. Although there was not much studies as for anxiety and phobia, studies conducted for the relationship between fear and worry suggested similar findings. Worry and fear are correlated. Similar with worry, there was not much study on the relationship of fear to depression, so it is difficult to comment on the relationship of fear to depression.

### **2.1.2. Fear Assessment Techniques**

A range of assessment methods was employed in fear studies since early years. As it was mentioned before, fear is an adaptive emotion as well as may damage well-being of the individual. For that reason assessing fears of children and adolescents with valid and reliable instruments which are appropriate to their age and stage has an important role on the healthy psychological development of individuals.

Structured or unstructured observations (e.g. Jersild & Holmes, 1935), adult such as parent (mostly mothers) and teacher reports (e.g. Meltzer, Vostanis, Dogra, Doos, Ford and Goodman, 2008), children's own reports by interviews, fear lists and fear surveys (e.g. Slee & Cross, 1989) were used to examine fears of children in many research studies. Since young children are limited in verbal skills, direct observations of adults especially parents clarify fears of children. This method is widely used to assess fears of children younger than 8 years old. However, observations are unique to limited fear areas and number of children results cannot be representative.

Also researcher may need great amount of time to complete the study (Gullone, 1999).

Adult reports especially the reports of parents and teachers are another effective way of assessing fears of children, but sometimes perceptions of adults and children related to fear may not match and adults may underestimate or overestimate fears of children (Meltzer et al., 2008). In many research studies reports of adults and children were compared to validate the agreement between two reports. Jones (1988) administered a list of statements related to fears to 66 children average at age 10 and their parents. Children reported fear of accidents, death and nuclear wars, while parents reported their children have fear of scary movies, dark and dangerous animals. Parents expected their children have more number of fears than they really have. Older children have more abstract fears, so it is more difficult for adults to observe their fears than the fears of younger children which are more concrete. Hence, reports of adults and children expected to be more consistence for younger children (Gullone,1999). When children get older self- report sources to assess their fears provide more accurate results.

Interviews, fear lists and fear surveys are methods employed to examine fears of children from the primary source. Although it is more time-consuming and costly and also expectations of the interviewer may influence the responses, interview method is a very effective way of gathering information about the individual's experiences in detail. Fear lists are another way of learning experiences of the individual, but different than the interviews, interviewer have no negative effect on the data collection process, since the participant lists fears of own by recalling method. In this method, social and cognitive abilities of the participant should be taken into consideration, because, results may mislead the researcher. Older children

may recall more fears, but this does not mean they are more fearful than younger children (Ollendick & Hersen, 1984).

To assess the fears of children and adolescents the most commonly used method is fear survey schedules (Gullone, 2000, p.435). Fear survey schedules are predesigned documents prepared by experts to assess the fears of children and adolescents. Different than fear list method, children and adolescents were expected to rate their fear by given items. Fear survey schedules are easy, convenient and inexpensive way of examining fears of children. Researcher can gather information about the content, intensity and frequency of the children's fears in small amount of time and results of the study can be scored objectively (Gullone, 1999). As well as the advantages, like other data collection methods fear survey schedules have some disadvantages. One and most important of them is reflection degree of the participants' real fear. Participants' comprehension of the aim of the study should be taken into consideration, because children and adolescents sometimes may misunderstand the items and respond in socially desirable way.

In the literature 4 main fear surveys used for assessing fears of children and adolescents were mentioned. Louisville Fear Survey Schedule for Children (Miller, Barrett, Hampe, Noble, 1971) is an 81 itemed and 3- point Likert type scale measuring fears of children and adolescents between the ages 4 and 18. Children rate their fear as 1= no fear, 2= reasonable/ normal fear, 3= excessive/ unrealistic fear. Miller et. al. (1972) suggested 3 factors; Physical Injury, Natural and Supernatural Dangers and Psychic Stress. Afterwards, Louisville Fear Survey Schedule was administered to mothers of children between the ages 6 and 16. Staley and O'Donnell (1984) suggested 5 factors; Physical Injury, Animals, School-Related, Night Fears, and Fear of Public Places.

Children's Fear Survey Schedule (Ryall & Dietiker, 1979) is a 48 itemed survey appropriate for children between the ages 4 and 12. At the beginning children are shown pictures and asked to define the feeling of the character in the picture by using the words afraid, fear or nervous. The aim was to define participant's word for the concept of fear. Then children are given 48 items and two open-ended questions. Children are expected to rate their feeling (afraid, fear or nervous) which they are chosen previously by using not-, a little- or very-.

Fear Experiences Questionnaire (FEQ) was developed by Gullone, King and Ollendick (2000) to assess the fear experiences of children rather than stimuli. Also FEQ was designed to examine the sensations and thoughts associated with the fear experiences. FEQ was designed as 20 itemed and 5 point Likert type scale ( 0= none and 5=very much) but after the reliability and validity study, according to the anecdotal data from the participants one more item was added and FEQ was introduced as a 21 itemed scale. Four factor solution was suggested including Death and Danger, Social Evaluation and Psychic Stress, Physiological Experiences and Animal Fears.

Fear Experiences Questionnaire was adapted and translated into Turkish (Atılgan, Saçkes, Yurdugül & Çırak, 2007). Adolescents between the ages of 12 and 17 were participated in the study and for construct validity; exploratory, confirmatory and hierarchic factor analyses were conducted. For criterion -referenced validity, the correlation of the scale was examined with six scales. These were Beck Anxiety Inventory, Constant Anxiety Scale, State Anxiety Scale, Beck Depression Inventory, Submissive Acts Scale, and Rosenberg Self-Esteem Scale. For reliability of the scale, test-retest Cronbach Alfa ( $\alpha$ ) and McDonald Omega ( $\omega$ ) coefficients were

calculated. Cronbach Alpha reliability coefficients for subscales and for total scale were calculated. Results suggested that Fear Experiences Questionnaire is a valid and reliable instrument to assess fear experiences of adolescents in Turkey.

Fear Survey Schedule for Children is the most commonly used fear survey schedule among all fear surveys designed for children (Gullone, 1999). Scherer and Nakamura (1968) designed Fear Survey Schedule for Children based on the adult version by Wolpe and Lange (1964). Fear Survey Schedule for Children was 80 itemed 5 point Likert type scale (1= none and 5= very much) when it was first introduced. Ollendick (1983) revised the survey and introduced Fear Survey Schedule for Children- Revised. It was a 3 point scale (1= none and 3= a lot). The item content had not been changed since it was first introduced, but many new fears of children raised after many changes occurring all over the world, so Gullone and King (1992) added contemporary items and changed rating as 1= not scared and 3= very scared. FSSC- II was introduced. Burnham (1995) added 20 more contemporary items and introduced FSSC-AM with 98 items. FSSC has been used with children and adolescents between the ages 7 and 18 in different countries of the world (e.g. Shore & Rapport, 1998; Erol & Şahin, 1995).

In Turkey, Fear Survey Schedule for Children was adapted into Turkish by Erol, Şahin and Özcebe (1990). A revision of Yule and Rowland (1987) with 97 items was used with new added items. 110 itemed 5 point Likert type scale was adapted to Turkish. Test-retest reliability of the survey on 40 children from the low socioeconomic status with an interval of two months and convergent validity with Rutter Parent and Teacher Scale (Erol & Özcebe, 1988) were tested. Factor structure was examined and six factors were suggested; Non-specific General Fear Factor, Death, Natural disasters

and Religious Fears, Fear of the Unknown, Social Fears, Failure and Criticism and Medical Fears and Illness. It was concluded that Fear Survey Schedule for Children was a valid and reliable instrument to assess fears of children and preadolescents between the ages of 8 and 12.

In the literature Fear Survey Schedule for Children was used for different purposes such as providing information about the fears of children (e.g. Muris, Merckelbach & Collaris, 1997), discriminating normal fear from clinical fear (anxiety, phobia etc.) (e.g. Muris & Ollendick, 2002), evaluating treatments for disorders related to fear (e.g. Gullone, King, Tonge, Heyne & Ollendick, 2000), comparing fears of children in different countries (e.g. Burnham & Gullone, 1997), comparing fears of children in different mental and physical skill levels (e.g. King, Gullone & Stafford, 1990) and effects of events such as natural disasters on the fear development of children (Burnham, 2005).

However, McCathie and Spencer (1991) speculated that Fear Survey Schedule for Children do not assess actual fears of children but negative responses to possible occurrence of some events. According to them these events have low probability to occur. In this case they speculated that Fear Survey Schedule for Children especially some Fear of Death and Danger items do not assess fears of children. A modified version of FSSC named Fear Frequency and Avoidance Survey Schedule (FFASSC) for Children was introduced. FFASSC measures the frequency of children's FSSC items experiences and avoidance. 376 children between the ages 7 and 12 were administered the survey. Results indicated that children reported the highest levels of thoughts related to fears and avoidance behavior to similar items that they were previously identified as most prevalent fears among Fears of Death and Danger. For the same purpose, Muris, Merckelbach, Meesters and Van Lier (1997) conducted a study with 394 children between the ages

7 and 12. Children were administered Fear Survey Schedule for Children-Revised and following that they were asked to specify what they feared most. According to results there were some similarities in two reports of children as well as the differences. Children reported “bombing attacks”, “being hit by a car or truck” etc. as their most feared thing in the administration of FSSC- R while “spiders”, “wars” etc. were reported as their most feared things following the question “What do you fear most?” “Not being able to breathe” item was same for two of the reports. According to Muris, Merckelbach and Collaris (1997) there was a weakness of this study. Carry- over effects should be taken into consideration. Children were given FSSC-R and after that they were asked “What do you fear most?” Thereon, Muris et.al (1997) conducted a new study with 129 children between the ages 9 and 13. Children were divided into two groups. First group was given FSSC-R first and following this they were asked “What do you fear most?” and the second group were given in the reverse order. Findings concluded that the correlation between FSSC- R reports of children in the first and second group was .97 and the correlation between free option (the answer of the question “what do you fear most?”) reports of children in the first and second group was .68. It can be said that fear rank orders of children for FSSC- R reports and free option based reports were not sensitive to carry- over effects. Children reported “being hit by a car or truck” and “burglar breaking into house” as most fearful things for two of the methods. Muris et. al. (1997) suggested that Fear Survey Schedule-Revised and free option method have some superiority on each other. It would be a mistake to offer one as better than the other. They suggested using both methods together appropriately to sample, design and the aim of the study. Lane and Gullone (1999) conducted a study parallel with the previous studies. 439 adolescents between the ages 11 and 18 were administered Fear Survey Schedule for Children- II and given a cover page. Adolescents were asked to write their three greatest fears and then complete

FSSC-II. Most common fears generated with FSSC-II were different than most common self-generated fears. Male adolescents rank “spiders”, “death” etc as their most feared thing, but reported “someone in my family dying”, “not being able to breathe” etc. as response to FSSC-II. Any of the 10 most common fears matched. Results were similar for female adolescents. Therefore, Lane and Gullone (1999) suggested employing both methods for the examination of most common fears.

Many assessment techniques from different sources such as parents, teachers and children have been employed to examine the fears of children and adolescents at various ages. Some of the techniques are specific for some age groups or some of them are specific for the fear type to be measured. Fear surveys have been well accepted to be the most advantageous of all techniques. However, many research studies suggest the use of multiple techniques in the same study especially fear surveys and fear lists. Children and adolescents are expected to choose fears among the given items in fear survey techniques while they write their fears by recalling method in fear list method. By this way, any of the children’s and adolescents’ fears will be missed. In this study, also, two of the techniques, fear survey and fear list method were employed.

### **2.1.3. Responses to Fear and Coping Styles of Children with Fear**

As it was mentioned before, from late 19<sup>th</sup> century a large body of research was conducted on fear. The response of metabolism to fear was one of the research areas. Darwin (1872, p.333) mentioned about the combination of fear with astonishment. It was suggested that in the case of fear, facial expressions and body posture of individual change. Eyes, eyebrows and mouth are stretched by the feeling of fear and individual petrifies standing with any motion and breathing. Heart starts to beat faster and the skin sweats. Since metabolism starts to work faster disorder in salivation occurs

and mouth becomes dry. Gray (1987, p.53) explained the reactions of body to fear in a more simpler way and suggested that heartbeat and breathing starts to be faster and the hair of fearful individual bristles.

Similarly, McCathie and Spence (1991) suggested that fear is a reaction to threat and manifested through physiological responses such as heart palpitation and sweating, cognitive and behavioral responses such as decreasing contact with feared stimulus. According to Muris (2007, p.2) changes in the metabolism including heart rate, respiration and muscle tension of the fearful individual are preparation for the action to protect self from danger.

Although fear is an adaptive emotion, it is a source of stress for children and they employ some coping strategies to struggle with their fear. Coping is a response to reduce physical, emotional and psychological damages related to stressful life events (Synder, 1999, p.5). Folkman and Lazarus (1980, 1984) suggested ways of coping model and Rothbaum, Weisz, and Snyder (1982) suggested primary-secondary control model as coping strategies for adults. Ways of coping model suggest two ways of coping; problem-focused coping (directly dealing with the problem) and emotion- focused coping (regulating emotions). Similarly, primary- secondary control model suggests two ways; primary control (coping with the influencing conditions or events) and secondary control (maximizing individual's adaptation to situation). Models developed for adults can help the conceptualization of children's coping strategies model, but children respond to stress different than adults (Band & Weisz, 1988).

Mooney, Graziano and Katz (2001) conducted a study on the night time fears of children and their coping responses. 178 children between the ages 8 and 13 were administered The Children's Nightmare Fear Surveys and Children's Nighttime Coping Checklist. Children reported five major

categories of coping responses. First category was internal self- control type of responses such as “think of self that there is nothing to be afraid of”, “try to ignore my fear” etc., second category was drawing social support such as “call my mom or dad into my room and ask them sit close”, “ask mom or dad if everything is okay” etc., third category was using inanimate objects such as “hug pillow”, “cover my head with a pillow” etc., fourth category was prayer including “pry” and “say a prayer” and avoidance or escape was last category and divided into two parts as control over inanimate environment including “try to stay up later”, “look away from anything scary” etc. and control over others including “ask to get something to eat”, “ask to watch television” etc.

Mahat and Scoloveno (2003) examined the fears and coping strategies of Nepalese children between the ages 9 and 12. 79 children were given Child Medical Fear Scale and the Schoolagers’ Coping Strategies Inventory. Results indicated no significant relationship between the fear scores and number of coping behaviors used frequently. Four most frequently used coping strategies were “say I am sorry or tell the truth”, “draw, write or read something”, “do work round the house” and “think about it”. Children reported first two of the coping strategies as most effective and reported “pray” and “cry or feel sad” as effective to cope, also. Four least frequently used coping strategies were “hit throw or break things”, “pick on someone”, “bite nails or crack knuckles” and “yell or scream”. Children reported “hit throw or break things”, “pick on someone”, “get mad” and “bite nails or crack knuckles” as least effective ways of coping with their fears.

Burkhardt and Loxton (2008) examined the fears, coping and perceived efficacy of coping mechanisms of South African children between the ages 8 and 13. 141 children living in four different children’s homes were attended the study. Fear List Method and Fear Survey Schedule for

Children- Revised were employed and for coping strategies and perceived efficacy children were given blank sheets. 39% of the children reported that when they are afraid of something they seek for spiritual or social support. 32% of the children reported this way of coping as effective. 20% of the children reported problem focused avoidance and 11% reported this way of coping as ineffective. 11% of the children reported problem focused crying, but they reported this way of coping as effective half the time. Secondary coping strategies were reported by 53% of the children, primary coping strategies were reported by 42% of the children and lastly 4% of the children reported relinquished control coping strategies (no attempt to change stressful situation). Secondary coping strategies were reported as the most effective way of coping.

As it was mentioned before individuals employ various strategies to cope with their fear. Coping strategies of children are similar but different than the adults' way of coping. Generally, internal coping, social support, attachment with objects, religious beliefs, avoidance and escape was reported as effective ways of coping by children.

#### **2.1.4. Developmental Characteristics of Fear in Relation to Various Variables**

Development of fear is interpreted by several demographic factors such as age, gender, socioeconomic status, ethnicity, living environment, and geographic location.

Age is one of the most important variables on the development of children's and adolescents' fears. Many research studies mention about the "ontogenetic parade" (Marks, 1987, p.109) related to the change of children's and adolescences' fears with age. Warren and Sroufe (2004) suggested that children between the ages of 6 and 10 who are at school age

have fear of school with school adjustment period and have fear of bodily injury and physical danger with the development of cause and effect-relations and anticipation of dangerous events. Preadolescents between the ages 10 and 12 have fears related to social life following the development of social understanding and friendship. Adolescents between the ages 13 and 18 have fears of social life related to the development of identity, sexual relationships and physical changes. According to Piaget (1970) children develop cognitively as they get older. Children pass through the formal operations stage from concrete operations stage and conceptualization changes from concrete thinking to more abstract thinking. Conceptualization of fear depends on the cognitive development. Thus, children have more concrete fears when they are young and fears change to more abstract one as they get older.

In a qualitative study, Bauer (1976), asked 54 children from kindergarten, second and sixth grade to draw picture about their fears and to tell what those drawings are about. It was found that mostly bedtime fears and frightening dreams were reported in kindergarten and second grade level, while fear of bodily injury and physical danger were mostly recorded in sixth grade level. Fear frequency of imaginary themes including fears of ghosts and monsters, bedtime fears, frightening dreams decreases with the increase of grade level, while realistic fears including fears of bodily injuries and physical danger increases.

Similar with age, gender determines the difference between the fears of children and adolescents. Gender differences in the fears of children and adolescents most commonly explained by the gender role expectations (Ollendick, Yang, Dong, Xia, Lin, 1995). Although societies differ in specific tasks, children and adolescents are expected to learn feminine and masculine behaviors, traits and skills in every culture (Bem, 1981).

Expressing emotions such as fear and behaviors are tolerated, accepted and encouraged in girls with feminine gender role. Boys are expected to be more self-confident and to learn ways to reduce their fear by masculine gender role.

In the literature studies examining the fear development of children and adolescents covered age and gender differences together. In this review studies examining age and gender differences between the fears of children and adolescents were taken together.

Many research studies were conducted in different countries of the world and also in Turkey to investigate the fears of children and adolescents with regard to their age and gender. Gullone and King (1992) examined the fears of children and adolescences from ages 7 to 18 in Australia. In this study FSSC-II was introduced after reliability and validity study. 918 children and adolescents (50% of them are female) were administered Fear Survey Schedule for Children- II. Participants were divided into three age groups; 7-10 years old, 11-14 years old and 15-18 years old. For total scores, scores of death and danger fear, the fear of unknown and animal fears youngest children who are between the ages 7-10 have the highest fear scores among all age groups. Most commonly endorsed fears of children and adolescents in Australia were “AIDS”, “someone in my family dying”, “myself dying”, “not being able to breathe”, “being threatened with a gun”, “taking dangerous drugs”, “being kidnapped”, “nuclear war”, “being hit by a car or truck” and “sharks”. The oldest group (ages 15-18) had higher fear intensity scores for the item “having to talk in front of my class” which is more socially realistic than the others. For overall and five factors scale (death and danger, the unknown, failure and criticism, animals, psychic stress-medical fears) girls had significantly higher scores than boys. Fears of animals such as rats, mice, snakes, spiders and of unknown such as creepy

houses and bad dreams are more fearful things for girls than boys. Authors speculated that, this is closely related to gender-role stereotyping and boys cannot express their fears of animals and unknown when they are together with their friends. Gullone and King (1993) presented fears of children and adolescents gathered from the previous study in a new one.

Burnham and Gullone (1997) conducted a similar study with 720 children and adolescents between the ages 7 and 18. Children and adolescents were divided into same age groups; 7-10 years old, 11-14 years old and 15-18 years old. Results indicated 10 most common fears of children and adolescents in the United States. Fears of children and adolescents in the United States were compared with the fears of children and adolescents in Australia, as reported by Gullone and King (1993). Most commonly endorsed fears of children and adolescents in United States were “AIDS”, “not being able to breathe”, “being threatened with a gun”, “myself dying”, “being kidnapped”, “being hit by a car or truck”, “someone in my family dying”, “murderers”, “nuclear war and “falling from high places”. For each of the fear types (fear of death and danger, fear of unknown, fear of animals, school and medical fears and fear of failure/ criticism) female children and adolescents reported higher levels of fear than male children and adolescents. Fear of children and adolescents with regard to their age was significantly different for fear of death and danger, fear of unknown and animal fears. Youngest children (ages 7-10) reported highest level of fear for fear of death and danger and fear of unknown scores. For animal fears oldest participants (ages 15-18) reported the highest level of fears.

Ollendick, Yang, King, Dong and Akande (1996) compared fears of American, Australian, Chinese and Nigerian children and adolescents. 1200 children and adolescents (300 each from America, Australia, China and Nigeria) from ages 7 to 17 were attended the study. Participants were

divided into three age groups; 7-10, 11-13 and 14-17 years old. Fear Survey Schedule for Children- Revised was administered to children and adolescents. Results indicated that fear level of Nigerian children and adolescents were significantly higher than children in America, Australia and China. Fear levels of girls were significantly higher than boys in America, Australia and China, but not in Nigeria. Nigerian boys reported higher level of fear than girls, although it was not significant. Youngest children (7-10 years) reported higher level of fear than the other two groups who are older in America and Australia. 11-13 years old preadolescents reported the highest fear level in China. In Nigeria results reported no significant difference between the fear levels of children in different age groups. Nigerian children reported more number of fears than other children. Girls in America, Australia and China reported more number of fears than boys but, Nigerian girls did not. 7-10 years old children in America, Australia and Nigeria reported more fears than the other age groups, in China 7-10 years old children and 11-13 years old preadolescents reported more fears than the other age group. 10 most common fears of each country were reported different. For America 7 of the top 10 fears (“earthquakes”, “failing a test” and “having my parents argue” were replaced by “a burglar breaking into our house”, “looking foolish” and “getting lost in a strange place”), for Australia 8 of the top 10 fears (“getting poor grades” and “death/dead people” were replaced by “a burglar breaking into our house” and “germs/ getting a serious illness”), for China 7 of the top 10 fears (“bombing attacks- being invaded”, “falling from high places” and “death/dead people” were replaced by “getting a shock from electricity”, “bears” and “ghosts or spooky things”) and for Nigeria 6 of the top 10 fears (“not being able to breathe”, “fire- getting burned”, “failing a test” and “having my parents argue” were replaced with “snakes”, “guns”, “getting a shock from electricity” and “deep water/ ocean”) were same.

In another study, Svesson and Öst (1999) utilized a sample of 550 children and adolescents between 8 and 16 years old in Sweden and administered Fear Survey Schedule for Children- Revised. Children and adolescents were divided into 3 age groups; 8-10 years old, 11-13 years old and 14-16 years old. According to the results there were no significant difference between age and gender groups but younger children (8-10 years old) reported a higher level of fear than the other age groups for total fear and different factors of fears scores. Most common fears of children in Sweden were “bombing attacks- war”, “not being able to breathe” , “fire- getting burned”, “being hit by a car or truck”, “germs or getting a serious illness”, “earthquakes”, “death or dead people”, “falling from high places”, “a burglar breaking into my house”, “getting lost in a strange place” and “snakes”.

As it was mentioned above Muris and Ollendick (2002) conducted a study to examine fears of adolescents in Belgium. In this study also relationship of fear to anxiety was also examined (given on page 14). To investigate the fears with regard to age and gender 551 adolescents between the ages 12 and 19 were administered Fear Survey Schedule for Children- Hawaii which is a revision of FSSC-R. Adolescents were divided into two age groups; 12-15 years old and 16-19 years old. Analyses were conducted for both five (fear of death and danger, fear of unknown, fear of failure and criticism, animal fears, medical and situational fears) and seven (fear of death and danger, aversive social fears, fear of unknown, animal fears, medical and situational fears, school performance fears, anticipatory social fears) factor solutions. Results indicated significant difference between age and gender groups. It was reported that level of female adolescents’ fear were higher than level of male adolescents’ fear for total scores and all fear factors. For five factor solution results indicated that younger children (12-15 years) had higher fear scores than older children (16-19 years) for Fear of Death and

Danger and Fear of Failure and Criticism scores. Similarly, for seven factor solution results indicated that younger children had higher fear scores than older children for Fear of Death and Danger, Aversive Social Fears and School Performance Fears. Most common fears of adolescents in Belgium were “AIDS”, “being killed or murdered”, “family member dying”, “being raped”, “bombing attacks- being invaded”, “nuclear war”, “being kidnapped”, “drowning”, “myself dying” and “germs or getting a serious disease”.

As it was mentioned before Burnham (2005) added 20 new contemporary items to Fear Survey Schedule for Children- II and American Fear Survey for Children (FSSC-AM) was introduced. Pilot study was conducted with 239 participants with ages 10 to 18. 720 children and adolescents between the ages 7 and 18 were administered new survey, FSSC-AM. Age groups were same with the previous ones; 7-10 years, 11-14 years and 15-18 years. Among new added items “being raped” and “drive-by shootings” were reported in the list of most common fears by females while “getting my girlfriend pregnant” was reported by males. Children between the ages 7 and 10 did not report any of the new added items in the most common fears list. Second age group (11-14 years) reported “being raped” and “drive-by shootings” and third age group reported “having to fight in a war” and “my getting pregnant or getting my girlfriend pregnant” in the most common fears list among new added items. Similar with previous studies female children and adolescents reported higher level of fear than males for total and different factors of fear. The difference between three age groups was significant for level of fear in total score. The level of fear reported by the youngest group was higher than the other groups for total scores. Results indicted significant difference between fear level of three age groups for Fear of Death and Danger, difference between fear level of youngest and

middle groups for Fear of Unknown and difference between fear level of youngest and oldest groups for Animal Fears.

Meltzer, Vostanis, Dogra, Doos, Ford and Goodman (2008) conducted a qualitative study with children between the ages 5-16. Children and adolescents were divided into two groups. The first group included children between the ages 5-10. Their parents were interviewed and teachers were sent a questionnaire. The second group was formed of children between the ages 11-16. Parents and children were interviewed in the same order and the teacher was sent a questionnaire. Parents were shown a list of fears (12 fears) most commonly endorsed by children and they were asked to report if their children had any of them. 32% of the parents reported that their children had one of the listed fears and 19% of these children just had one fear. Most commonly parents reported animals (11%), blood/ injections (10%) and the dark (6%) as fears of their children. Girls reported more fears of animals, blood, injection or injury, elements in the natural environment and specific types of people, i.g. clowns, people with beards or crash helmets than boys. Younger children (5-10 years old) reported more fears of dark, the natural environment, loud noises, imaginary or supernatural things and specific types of people than older children. Older children (11-16 years old) reported more fears of disease and enclosed places than younger children.

Socioeconomic status has great importance on the differences of children and adolescents' fears as well as the age and gender. Especially differences in fear content among children and adolescents from different socioeconomic background were speculated to be because of the different environmental experiences (Ollendick, Matson, Helsel, 1985). Graziano, DeGiovanni, and Garcia (1979) suggested that children from low socioeconomic status perceive environment as more hostile than children

from high socioeconomic status. Since it was speculated that environmental experiences make difference among fears of children and adolescents the influence of race/ ethnicity and community type (rural, urban, suburban) on fears of children and adolescents can be mentioned in this part.

A very early follow up study of Jersild and Holmes (1935) about children's fears was conducted with 1,100 children between the ages 9-18. Children were classified as high and low socioeconomic status (SES) according to schools they were chosen from. For all of the age levels and for both genders children and adolescents from low SES reported higher level of fear than high SES counterparts. The most fearful issue for children from both socioeconomic statuses was found to be safety. In the qualitative inspections for the male children and adolescents from low SES, domestic violence was reported to be more fearful than for the males from high SES. However, males from upper SES reported higher level of disaster fear than their low SES fellows. Number of females from low SES reported fear of strangers and animals was more than the other group, while number of females from high SES reported fear of pet's safety and getting hurt was more.

Angelino, Dollins and Mech (1956) conducted a study to compare fears of children and adolescents between the ages 9 and 18 from different socioeconomic backgrounds Oklahoma. Participants were classified as being from either "low" or "high" socioeconomic background. "Safety" concerns were reported as the most fearful thing by females and males. Fears of female and male participants were examined separately. Males from low SES reported higher level of fears related to violence (robbers, killers, guns, switchblades, dope peddlers and whippings) and fear of parents than the males from high SES. Males from high SES reported higher level of fears related to car accident, storms, being hurt, getting killed, juvenile delinquents, school accidents and disaster than males from low

SES. Females from low SES reported higher fear level of fears related to animals, strangers, act of violence, being alone at night and drunks than females from high SES. On the other hand, females from high SES reported higher level of fears related to kidnappers, heights, wrecks, roller coasters, Communist attacks, riots, pet's safety, getting hurt.

In Turkey, Erol, Şahin and Özcebe (1990) examined fears of children between the ages of 8 and 13. Fear Survey Schedule for Children was administered to 1237 children from low socioeconomic status, 641 children from high socioeconomic status in Turkey and 118 Turkish children in Holland. Data collection was finished in 1987 and results were presented by Erol and Şahin (1995), also. Findings indicated that female children reported higher level of fear than males for all socioeconomic status groups. Children from low socioeconomic status reported higher level of fears than children from high socioeconomic status. Fears of children from Holland were reported similar to the fears of children from low socioeconomic status in terms of content and intensity. "Hell", "death of my mother", "death of my father", "shot with firearm", hit by car or lorry" and "separation from parents" were reported as the most fearful things by three of the groups. Children from low socioeconomic status reported "devil" and "violating a religious rule" in the most intense fears list.

Roubos (1983) examined the fears of adolescents living in rural and urban areas in America. 2728 ninth grade students were asked to write a composition about their fears and their ways of overcoming the fears. Adolescents living in urban area reported fears of insects and miscellaneous fears, while ones living in rural area reported fear of being alone in the dark. Girls from urban areas more frequently reported fears of spooks than one in rural areas. Boys from urban areas more frequently reported fear of heights

than girls from urban areas. Girls from rural area more frequently reported fears of people than boys from the same area.

King, Ollier, Iacuone, Schuster, Bays, Gullone and Ollendick (1989) utilized a sample of 3118 children and adolescents between 8 and 16 years old attending urban and rural schools in Australia. Children and adolescents were administered Fear Survey Schedule for Children- Revised. Findings suggested that number of fears reported by children and adolescents attending urban schools was more than the number of fears reported by children and adolescents attending rural schools.

Shore and Rapport (1998) conducted a study with a sample of 85 children and adolescents between the ages 7 and 16 from different ethnic backgrounds (Caucasian, Asian, Filipino and Hawaiian) in Hawaii. Fear Survey Schedule for Children- Hawaii was used as a measurement tool. Caucasian children reported lowest total fear scores and least number of fears among all children from different ethnic backgrounds. Similarly, Caucasians reported the lowest fear scores for seven factors (fear of danger and death, fear of unknown, worries, anticipatory social fears, fear of animals, aversive social fears and social confirmatory fears). The differences between the fear scores of Filipinos and Caucasians were not significant for Fear of death and Danger and Animal Fears factors. Results indicated no significant difference between Anticipatory Social Fears of Hawaiian and Caucasian children and adolescents. Fear scores of Asians, Filipinos and Hawaiians significantly differ only for the Anticipatory Social fears. Filipinos scored significantly higher than Asians and Hawaiians. All of the ethnicity groups reported “family member dying”, “being killed or murdered”, “myself dying”, “being kidnapped”, “AIDS” and “falling from high places” as the most feared items. Caucasian, Filipino and Hawaiian children and adolescents reported “being kidnapped” and “bombing attacks-

being invaded”, Caucasians, Asians and Hawaiians reported “not being able to breathe”, Caucasians and Asians reported “nuclear war”, Caucasians and Filipinos reported “being raped” item in the most common ten fears list. Asians reported “death or dead people” and “burglar breaking into my house”, Filipinos “fire- getting burned” and Hawaiians reported “guns” different than the other groups.

Ingman, Ollendick and Akande (1999) compared the fears of Kenyan and Nigerian children and adolescents practiced Christianity and Islam. 852 (551 from Nigeria and 310 from Kenya; 217 practiced Christianity and 635 practiced Islam) children and adolescents between the ages 8 and 17 were administered Fear Survey Schedule for Children- Revised. Findings suggested that Nigerian children and adolescents reported higher level of fear than children and adolescents from Kenya for total scores and four factors (fear of failure and criticism, fear of unknown, fear of injury and small animals and medical fears), but Kenyan children and adolescents reported higher fear level than Nigerian children and adolescents for fear of death and danger scores. Analyses revealed that Christian children reported higher level of fear than Muslim children for fear of failure and criticism, fear of unknown and fear of injury and small animals scores. Authors did not report most common fears for different groups.

A current study by Burnham and Lomax (2009) was conducted with 1030 White, African American, Hispanic, Asian American and Native American children and adolescents aged 8 to 18. Results indicated that White children and adolescents reported higher level of school/family related fears than African American participants did, while African American children and adolescents reported higher level of animal fears than White and Hispanic participants did and higher fear level of death and danger than White children and adolescents did. African American and Hispanic children and

adolescents reported higher fear level of scary things than White children and adolescents. Since, Storch, Nock, Masia-Warner, Barlas (2003) speculated that Hispanic and African American children and adolescents are exposed to higher level of violence than White ones, according to the authors (Burnham & Lomax, 2009) this fact played a role on the differences between Fear of Scary Things scores of children and adolescents from different ethnic backgrounds.

As it was reported in related studies, social factors like socioeconomic status, race/ethnicity and community type (rural, urban, suburban) play important role on the fears of children and adolescents. Family as the closest piece of social environment had a very important role on the children's and adolescents' fears. In his comprehensive study with age, gender and socioeconomic status, Meltzer et al. (2008) investigated the relationship between family type and working status of them with the fears of children. It is found that children with two parents had more fears of loud noises and small enclosed places while children with one parent had more dark and animal fears. Children of working parents had more fears of transportation vehicles. Since there is limited information about the role of family type and working status of them on the fears of children and adolescents in the literature, it is difficult to generalize the results to population.

In China a study with 731 children ages ranging from 7 to 17 was conducted by Yang, Ollendick, Don, Xia and Lin (1995) to examine the relationship between number of siblings and fears of children. Fear Survey for Children-Revised was used as a measurement tool. Children and adolescents were divided into two groups according to having or not having siblings; only sibling and multiple siblings. The need for such a study came after the one-child-per-family policy of China. Similar with the parents it was found that presence of siblings was influential on children's and adolescents' fears.

Unexpectedly, children and adolescents with siblings reported higher level of fears than only children and adolescents for total fear scores and three factors (fear of failure and criticism, fear of death and danger and fear of unknown). Sibling status groups did not differ on the fears of small animals and medical fears.

As it was supported with research studies, fears of children and adolescents differ according to their age, gender, socioeconomic status, ethnicity and the community type they are from and even the parent and sibling status. Not only demographic factors but also negative experiences such as disasters (man-made or natural disasters) have impression on children's and adolescents fears. Moreover, not only being exposed to the disaster directly, but also watching or hearing about the disasters effect children and adolescents negatively. Many research studies have been conducted about man-made (terrorist attacks in USA, wars in Iraq etc.) and natural (earthquakes, floods etc.) disasters. In most of them the term "distant trauma" which refers to the fear of children who did not experience the trauma but have the fear of that traumatic event especially by media exposure (Terr et al,1999).

In 1988, a cruise ship called Jupiter, including nearly 500 people (students, teachers and other adults) set sail from Greece. The Jupiter crashed to oil tanker just 20 minutes after they moved from the harbor and the ship sank in 45 minutes. A student, a teacher and two seamen died in the accident. Yule, Udwin and Murdoch (1990) conducted a study to examine fears of children and adolescents after the accident with participants from a girls' secondary school. Participants were divided into four groups; "cruise survivors", "near miss" who wanted to attend the trip but did not go, "no interest" who have no relationship to the accident in the same class attending the trip and "control group" who are in the same school with the other but not related to

the accident. For this study 17 new items related to fear of boat travel and fear of water were added to Fear Survey Schedule for Children. Results indicated that cruise survivors reported the highest fear level for the total score. Analyses were conducted separately for item related and unrelated to the event. The items related to the event were “dead people”, “getting lost in strange place”, “being in a crowd”, “the sight of blood”, “deep water or the ocean”, “nightmares”, “loud sirens”, “dark places”, “travelling by boat or ship”, “swimming” and “loud noises”. For those items cruise survivors reported the highest scores. For three factors (fear of unknown, fear of death and danger, medical fears) cruise survivors reported highest scores. For fear of injury and small animals scores “near miss” group reported the highest scores.

In 2001, on September 11, four commercial airplanes were hijacked and flew into World Trade Center and Pentagon. Burnham (2007) conducted a study to examine if fears of children and adolescents living in southeastern states of America differ before and after the terrorist attack. The data collected before the attack were called as the pre-9/11 data and after the attack were called as post-9/11 data. Pre-9/11 data were collected in 1995 and included 244 children and adolescents between the ages 7 and 18. Post-9/11 data were collected between November 2001 and February 2003 and included 598 children and adolescents with the same age of pre-9/11 data. American version of Fear Survey Schedule for Children was administered to children and adolescents. Nine terror fear items were investigated, specifically. They were “our country being invaded by enemies”, “nuclear war”, “murderers”, “flying in a plane”, “being threatened with a gun”, “terrorist attacks”, “having to fight in a war”, “drive-by shootings” and “people carrying guns/knives/ weapons”. Interestingly, the pre-9/11 and post-9/11 fear intensity scores for all fear items were not significantly different.

At this point we may mention about the stability of fears suggested by Eme and Schmidt (1978). They suggested that fears of children and adolescents may change in content, but not in intensity and number in years. In the present study, results indicated that post-9/11 participants reported significantly higher level of fears for “our country being invaded by enemies”, “terrorist attacks” and “flying in a plane” items than pre-9/11 participants. Results were same for girls and boys separately.

A similar study was conducted with 216 children and preadolescents between the ages 9 and 13 living in Netherlands (Muris, Mayer, Eijk & Dongen, 2008). 52% of the participants had Dutch background and 30% of them came from Islamic countries. Children and adolescents were given Fear Survey Schedule for Children – Revised and vignette tasks referring to social threat, general threat and terrorism threat/control. Children and preadolescents from Dutch background reported higher fear of terrorism scores than children and preadolescents with an Islamic background. Two of the terror related items “bombing attacks” and “explosion in the bus or subway” were ranked in the 10 most common fears list. It was speculated that children and preadolescents with Dutch background reported higher fear of terrorism scores than children and preadolescents with Islamic background, because Muslims have a more realistic picture of the Islam and small chance that an Islamic individual would engage in terrorist activities.

Invasion of Iraq in 2003 was known as the start of Iraq War. Millions of people all over the world watched the war in detail from televisions and children did the same, too. Burnham and Hooper (2008) conducted a study to compare fears of children and adolescents from two samples; pre-invasion and post-invasion. Pre-invasion participants were 137 children and adolescents between the ages 7 and 17 (Burnham, 1995). Post- invasion participants were 82 children and adolescents between the ages 7 and 18.

Children and adolescents were administered American version of Fear Survey Schedule for Children. Post-invasion group reported seven of the nine terror-related items in the 20 most common fears list. They were “nuclear war”, “terrorist attacks”, “murderers”, “being threatened with a gun”, “drive-by shootings”, “having a fight in a war” and “our country being invaded by enemies”. When compared pre-invasion group reported five of the terror related items in the same list. They were “being threatened with a gun”, “murderers”, “nuclear war”, “drive-by shootings” and “having a fight in a war”.

In 1999, two earthquakes hit Turkey and nearly 20,000 people were death, 600,000 people were injured. Karairmak and Aydın (2008) utilized 119 earthquake victim and 147 nonvictim children living in Turkey between the ages 11 and 15. One of the aims of the study was to compare the fears of earthquake victim children and nonvictim children. A version of Fear Survey Schedule for Children with new items related to fear of boat travel and fear of water was used as a measurement tool. It was translated into Turkish by Erol, Şahin and Özcebe (1990). For this study 26 items that seem to be related to an earthquake experience were chosen and authors added 4 new items; fear of dark, fear of being in closed places, fear of reoccurrence of earthquakes and fear of being trapped in debris. Four factor solution was suggested; Fear of Injury, Fear of Death and Separation, Fear of Reminders and Earthquake-Related Fears. Victim group reported higher level of fears for Fear of Reminders and Fear of death and Separation scores. Results indicated that there was no significant differences between the Earthquakes-Related Fear scores of both groups. Authors speculated that nonvictim children may be traumatized vicariously.

Thus far, the influence of demographic factors such as age, gender etc. and disasters such as terrorist attacks, earthquakes etc. in the fear development

of children and adolescents were examined. Although there is not much examples the role of genetic influences in the development of fears should be considered.

Rose and Ditto (1983) examined the role of genetic influences in the fear development of children and adults between the ages 14 and 34. Totally 354 twins were attended the study. Adult version of Fear Survey Schedule-II was used as a tool. Results indicated that fear of loved one's misfortune and personal death showed similarity for twins although some variations were observed among different age groups. Authors suggested an important role of genetic factors in the development of fears.

A similar study was conducted by Stevenson, Batten and Cherner (1992). 384 twins between the ages 8 and 18 were administered Fear Survey Schedule for Children- Revised. Results indicated that there was no significant difference between the fear scores of twins for Fear of Failure and Fear of Medical procedures. Genetic effects on individual differences in fearfulness were reported only for fear of unknown and fear of injury and small animals.

As it was mentioned before, fear has been the interest of research studies from very early years and so, many aspects of fear have been investigated. Especially the relationship of fear to demographic characteristics has been examined in detail. Most of the studies, although some of them did not agree, suggested that increasing age decreases the frequency of fears. Fears of children in the early childhood level mostly related with strangers, while school age children have fears of school. Preadolescents and adolescents have fears of socially acceptability and physical fears since they are in a change with their body and their emotions. Research studies are consistent with the relationship of fear to gender differences. For all age groups female children and adolescents report higher fear level than males. Although

results were not consistent, most of the research studies suggested that children from low socioeconomic status reported higher level of fears than children from middle and high socioeconomic status. Also, fear content of children from different socioeconomic backgrounds is different than each other. Especially safety issues such as kidnappers, murderers etc. are more commonly reported by children from low socioeconomic status. Not only demographic characteristics but also negative life events have influence on children's and adolescents' fear acquisition. Most of the studies, such as studies related to the fears of children survived from earthquakes reported that fears of children and adolescents may change with negative life events.

As it was mentioned above children and adolescents have fears specific to their age, gender, socioeconomic status etc. and this is a part of normal development. Gifted, mentally retarded, hearing impaired, seeing impaired, physically handicapped etc. children have different fears as well as special needs different from "normal" fellows.

An early research of Gullone, Cummins and King (1996) included totally 559 children. 187 of them were identified as having intellectual disability and 372 had no identified disability. Participants were divided into three age groups; 7-10 years old, 11-14 years old and 15-18 years old. Fear Survey Schedule for Children- Revised was administered to children and adolescents. For total scores and scores of different fear factors (fear of death and danger, fear of unknown, fear of failure and criticism, animal fears and psychic stress- medical fears) children and adolescents with disabilities reported higher level of fears than children and adolescents without disabilities. Disabled children reported "hit by a car or truck", "being kidnapped", "murderers", "being threatened with a gun", "Burglar breaking into our house", "Taking dangerous drugs", "Not being able to

breathe”, “AIDS”, “Myself dying”, “snakes”, “getting and electric shock”, “sharks” and “someone in my family dying” as most feared items.

A similar study was conducted with 200 children and adolescents between the ages 7 and 18 by Li and Morris (2007). 131 of the participants have learning disabilities and 69 of them have mild mental retardation. Children and adolescents were divided into three age groups similar with the previous studies (7-10 years, 11-14 years and 15-18 years). Fear Survey Schedule for Children- Revised was used as a measurement tool. For total scores, fear of unknown, fear of minor injuries and small animals and medical fears scores children and adolescents having mild mental retardation reported higher level of fear than children and adolescents having learning disabilities. Only for the scores of fear of failure and criticism children and adolescents with learning disabilities reported higher level of fears than children and adolescents having mild mental retardation. Although rank orders varied both groups reported “being hit by a car or truck”, “bombing attacks”, “a burglar breaking into our house”, “not being able to breathe”, “fire- getting burned”, “falling from high places”, “getting a shock from electricity”, “death or dead people”, “germs or getting a serious illness” and “earthquakes” as the most feared items.

Li and Prevatt (2007) conducted a study with 286 children and adolescents between the ages 7 and 18. 46% of the participants were diagnosed with learning disabilities, 27% were with mild mental retardation, 9% were with health impairment, 8% were with orthopedic impairment, 6% were with speech or language impairment and 4% were with hearing impairment. Fear Survey Schedule for Children- Revised was administered to children and adolescents. For total fear scores and fear factors (fear of failure and criticism, fear of unknown, fear of minor injuries and small animals, fear of death and danger and medical fears) results indicated that girls reported

higher level of fear than boys did. Medical fears scores of the group between the ages 7 and 10 was reported as the highest. The group between the ages 11 and 13 reported the highest level of fear scores for total scores, fear of unknown, fear of minor injuries and small animals and fear of death and danger scores. The highest level of fear scores for fear of failure and criticism was reported by the oldest group (ages 14-18).

Tippey and Burnham (2009) conducted a study with gifted children to examine their fears. From different racial backgrounds (White, Black, Hispanic, Asian and American Indian), 287 children were participated in this study between the ages 7-10. Children were given American version Fear Survey Schedule for Children. girls reported higher level of fears for the items “shootings”, “strangers”, “having to fight in a war”, “riots”, “being threatened with a gun”, “gangs” among the Fear of Death and Danger factor. Similarly, girls reported higher level of fears for “rats” and “snakes” among Animal Fears factor. Black children reported higher level of fears for the items “strangers”, “getting an electric shock” and “myself dying” from Fear of Death and Danger factor and “rats”, “tigers” and “lizards” from Animal Fears factor. White children reported higher level of fears for the items “my parents getting separated and getting divorced”, “being in a fight” and “getting lost in a crowd” among Fear of Death and Danger factor.

## **2.2. Origins of Fears**

Fears of children and adolescents can be defined as originated from the interaction of biological, environmental and cognitive factors (Du, Jaaniste, Champion & Yap, 2008).

From the beginning of fear studies, fear responses to stimuli have been defined as the way of avoiding dangerous situations and objects which can be defined as evolutionary advantage for the individual. (Seligman, 1971;

Mineka & Öhman,2002). Fears such as heights, strangers and loud noises can be examined to be innate (Poulton & Menzies,2002). As well as being biologically programmed, individuals' preparedness to the stimuli determines the development of fear. Such as individuals who had no contact with snakes reported fear of snakes (Agras, Sylvester & Oliveau, 1969). Similar with the biological factors, as it was mentioned before the role genetic factors on the fear development cannot be ignored. Stevenson et al. (1992) suggested that fear intensity of twins were similar to each other.

Ranchman (1977) suggested that fears are learnt through three pathways (one or combination of three); (1) classical (direct) conditioning; individuals' direct exposure to the fearful object or event results with fear, (2) vicarious learning- modeling; individuals' observations not direct exposure results with fear, (3) negative information transmission; negative information about the fearful event or stimulus results with fear.

Duff and Brownlee (1999) utilized a sample of 7 to 18 years old children and adolescents. Results supported the role of classical conditioning on the fear acquisition of children and adolescents. 63% of the participants recalled a negative experience of injection and 46% of them reported high level of injection fear.

Muris, Steerneman, Merckelbach and Meesters (1996) investigated the relationship between the fears of parents and children. 40 children and preadolescents between the ages 9 and 12 were administered Fear Survey Schedule for Children and parents were administered Adult version of Fear Survey Schedule. Fearfulness of the children was only found to be related with the fears of mothers. Results indicated a direct relationship between the fears of children and mothers' expressions of fears. Children of mothers' who did not express their fears reported the lowest and children of mothers' who expressed their fears reported the highest level of fears.

Muris, Bodden, Merckelbach, Ollendick and King (2003) utilized 285 children and preadolescents between the ages 4 and 12 years old to examine the relationship between the negative information transmission and fear intensity. Before start participants were given Fear Survey Schedule for Children. Children and preadolescents were informed about an animal called “the beast” with two stories; first including positive and second including negative information about the animal. After the presentation of each story and following week children and preadolescents were given FSSC. At the end of the study children and preadolescents were informed about the story and told it was produced for the purpose of that study. Results indicated that fears of children and preadolescents for fear of dogs and fear of predators were increased after they were presented the story including negative information about the animal. Reversely, results indicated a decrease in the fear of dogs and fear of predators of children and preadolescents’ fear scores after the story including positive information about the animal.

As it was mentioned before, Muris et al. (1997) conducted a study with 129 children between the ages 9 to 13. Participants were given Fear Survey Schedule for Children -Revised and interviewed for about 20 minutes. The aim of this study was to examine the origins of children’s and preadolescents’ fears and to investigate if these origins have intensification effect on their fears as well as defining fears of children and preadolescents. The majority of children (87.8 %) reported that they learnt their most feared thing or event by negative information transmission among. 49.6 % of children explained that the origin of their fear is modeling (vicarious learning) while 61.1 % of them explained the origin as conditioning. Results were the same for most of the fear factors (fear of animals, fear of death and danger, fear of failure and criticism, medical fears), children and preadolescents reported the origin of their fear as negative information

transmission, conditioning and modeling, respectively. For total fear scores and fear of animal, medical fears, fear of failure and criticism, fear of spiders children and preadolescents reported that conditioning intensified their fear. For fear of unknown and fear of death and danger items children and preadolescents reported that negative information transmission intensified their fears.

Another study was conducted with South African fellows of children about the origins of fears (Muris, Plessis & Loxton, 2008). 655 preadolescents between the ages 10 to 14 were given the list of 10 most common fears of children in South Africa developed by Burkhardt (2002). They were asked to choose the most intense one and explain the severity and the acquisition way of that fear. Ranchman's three ways of learning experiences were used to express the origin of fears. 73.3% of the preadolescents reported modeling, 67.4% reported negative information transmission and lastly 49.4% reported conditioning as their way of learning their most feared thing or event. 53% of the participants reported that negative information transmission, 42.2% of the participants reported modeling and 37.1% of the participants reported conditioning intensify their fear.

### **2.3. Summary**

Fears of children and adolescents have been the interest of many research studies from very early years. Several different definitions of fears were given, but in general researchers compromise fear as normal part of development although fear may negatively affect learning experiences. Since normal and abnormal fear is not very easy to differentiate, several research studies were conducted to investigate the relationship of fear to anxiety, phobia, worry and depression. Results indicted a strong relationship of fear to anxiety and phobia while not much to worry and depression. Individuals' responses to fear were examined from many aspects in the

literature. Somatic responses as well as emotional and cognitive responses were the interest of research studies related to responses of children and adolescents to fear.

Fears of children and adolescents were investigated with regard to their age, gender, socioeconomic status, ethnicity/ race, parent and sibling status and the community type they live in. Age and gender are defined as most important variables on the fear development of children and adolescents. Results of research studies investigating the relationship of fear to gender of children and adolescents suggested that female children and adolescents report higher level of fear for total and factor scores than male children and adolescents. Results of research studies related to the age and fear relationship did not suggest consistent results although most of them suggest that older children and adolescents report lower level of fear than younger ones. Socioeconomic status and race/ ethnicity were investigated, also. Children and adolescents from low socioeconomic background reported higher level of fear than children and adolescents from high socioeconomic background. Results of research studies investigating the relationship of fear to race/ethnicity reported that Black children have higher level of fears than White children.

As well as demographic factors, the relationship of fear to the negative events such as disasters was examined in the literature and most of the studies suggested that children and adolescents who experienced or had information (distant trauma) about disasters such as earthquakes and terrorist attacks report higher level of fears especially for fear of death and danger items.

Origins of fears were another important interest of fear studies. Environmental, biological and cognitive factors were discussed. Rachman (1977) three-pathways theory considered to be one of the most important

theories on fear acquisition. Three-pathways theory suggested the role of one or the combination of three ways; classical conditioning, modeling-vicarious learning and negative information transmission on the fear acquisition.

As it was mentioned before children's and adolescents' fears differ according to their age, gender and socioeconomic status. Also, as years pass many changes occur, such as technological development or negative life events (earthquakes, terrorist attacks etc.) and by this way fears of children and adolescents change. Last study examining the fears of children in Turkey was conducted in 1990 and since then many changes occurred in Turkey. So, fears of children and adolescents are needed to be assessed to gather current information. Also, origins of children's and adolescents' fears have not been examined yet in Turkey. In the present study, fears of children and adolescents will be examined with regard to age, gender and socioeconomic status and the origins of children's and adolescents' fears will be investigated according to three-pathways theory. The methodology of the current study will be presented in the next chapter.

## **CHAPTER III**

### **METHOD**

The method chapter describes the overall design of the study, characteristics of the participants in this study, data collection instruments, data collection procedures, variables, and limitations of this study.

#### **3.1. Overall Design of the Study**

The major goal of this study is to examine nature, severity and origins of fears of children and adolescents living in Turkey with regard to age, gender and socioeconomic status. To reach the goals, firstly Fear Survey Schedule for Children (FSSC) was adapted to Turkish and its psychometric properties were examined. Secondly, fears of children and adolescents living in Turkey with regard to age, gender, socioeconomic status and the origins of their fears were examined.

The total sample of the study consists of 1670 children and adolescents. To reach the participants convenient sampling method was utilized.

#### **3.2. Participants**

In this study, two different data sets were used. The first data set was used for test-retest reliability, convergent validity studies and the second data set was used for examining factor structure and internal reliability of the main data collection instrument.

### 3.2.1. Sample One

The first sample was comprised of 173 females (48.7%) and 182 males (51.3%) with total 355 participants aged between 8 and 18 ( $M=12.66$ ;  $SD=3.05$ ; Median=13; Mode=13). Demographic characteristics of the sample one were demonstrated in Table 3.1.

Of the participants 12.7% were 8 years old, 7% were 9 years old, 8.2% were 10 years old, 9.3% were 11 years old, 6.8% were 12 years old, 20% were 13 years old, 7% were 14 years old, 7.6% were 15 years old, 7.3% were 16 years old, 6.8% were 17 years old and 7.3% were 18 years old.

More than half of the mothers (67.3%) and nearly half of the fathers (49.9%) were graduated from elementary school. A great majority of mothers (97.2%) were housewives and nearly half of fathers (37.2%) were workers.

According to Kuppuswamy's Socioeconomic Status Scale 170 of the participants (47.9%) were from low socioeconomic status and 185 of the participants (52.1%) were from middle socioeconomic status.

Table 3.1

#### *Demographic Characteristics of the First Sample*

		Sample One	
		f	%
<b>Gender</b>	Female	173	<b>48.7</b>
	Male	182	<b>51.3</b>
	Total	355	<b>100</b>

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<b>Age</b>			
	8	45	<b>12.7</b>
	9	25	<b>7.0</b>
	10	29	<b>8.2</b>
	11	33	<b>9.3</b>
	12	24	<b>6.8</b>
	13	71	<b>20.0</b>
	14	25	<b>7.0</b>
	15	27	<b>7.6</b>
	16	26	<b>7.3</b>
	17	24	<b>6.8</b>
	18	26	<b>7.3</b>
	Total	355	<b>100</b>
<b>Number of sibling</b>			
	0	15	<b>4.2</b>
	1	63	<b>17.7</b>
	2	147	<b>41.4</b>
	3	99	<b>27.9</b>
	More than 3	31	<b>8.7</b>
	Total	355	<b>100</b>
<b>Mother Education</b>			
	Illiterate	30	<b>8.5</b>
	Elementary school	239	<b>67.3</b>
	Secondary school	47	<b>13.2</b>
	High school	34	<b>9.6</b>
	University	5	<b>1.4</b>
	Total	355	<b>100</b>
<b>Mother Occupation</b>			
	Housewife	345	<b>97.2</b>
	Civil Servant	2	<b>0.6</b>
	Worker	1	<b>0.3</b>
	Others	7	<b>1.9</b>
	Total	355	<b>100</b>
<b>Father Education</b>			
	Illiterate	15	<b>4.2</b>
	Elementary school	177	<b>49.9</b>

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	Secondary school	76	<b>21.4</b>
	High school	55	<b>15.5</b>
	University	32	<b>9.0</b>
	Total	355	<b>100</b>
<b>Father Occupation</b>			
	Not working	10	<b>2.8</b>
	Civil Servant	56	<b>15.8</b>
	Worker	132	<b>37.2</b>
	Others	157	<b>44.2</b>
	Total	355	<b>100</b>
<b>Income</b>			
	0-500 TL	82	<b>23.1</b>
	501-1000 TL	167	<b>47.0</b>
	1001-2000 TL	101	<b>28.5</b>
	2001-3000 TL	4	<b>1.1</b>
	4001-5000 TL	1	<b>0.3</b>
	Total	355	<b>100</b>
<b>Socioeconomic Status</b>			
	Low	170	<b>47.9</b>
	Middle	185	<b>52.1</b>
	Total	355	<b>100</b>

### 3.2.2. Sample Two

Second sample was comprised of 642 females (48.8%) and 673 males (51.2%) with a total 1315 participants aged between 8 and 18 ( $M=13.15$ ;  $SD=3.18$ ; Median=13; Mode=17). Demographic characteristics of the participants were demonstrated in Table 3.2.

Of the participants 8.7% were 8 years old, 9% were 9 years old, 7.8% were 10 years old, 9% were 11 years old, 8.4% were 12 years old, 9.5% were 13 years old, 9% were 14 years old, 8.9% were 15 years old, 8.9% were 16 years old, 11% were 17 years old and 9.6% were 18 years old.

According to Kuppuswamy's Socioeconomic Status Scale 632 of the participants (48.1%) were from low socioeconomic status and 683 of the participants (51.9%) were from middle socioeconomic status. As a result, it can be said that the participants of the current study are coming from lower to middle socioeconomic status.

Table 3.2.

*Demographic Characteristics of the Second Sample*

		<b>Sample Two</b>	
		<b>f</b>	<b>%</b>
<b>Gender</b>			
	Female	642	<b>48.8</b>
	Male	673	<b>51.2</b>
	Total	1315	<b>100</b>
<b>Age</b>			
	8	114	<b>8.7</b>
	9	119	<b>9.0</b>
	10	103	<b>7.8</b>
	11	119	<b>9.0</b>
	12	111	<b>8.4</b>
	13	125	<b>9.5</b>
	14	119	<b>9.0</b>
	15	117	<b>8.9</b>
	16	117	<b>8.9</b>
	17	145	<b>11.0</b>
	18	126	<b>9.6</b>
	Total	1315	<b>100</b>
<b>Number of sibling</b>			
	0	75	<b>5.7</b>
	1	349	<b>26.5</b>
	2	462	<b>35.1</b>
	3	299	<b>22.7</b>
	More than 3	130	<b>9.9</b>
	Total	1315	<b>100</b>
<b>Mother Education</b>			
	Illiterate	65	<b>4.9</b>
	Elementary school	475	<b>36.1</b>

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	Secondary school	310	<b>23.6</b>
	High school	356	<b>27.1</b>
	University	107	<b>8.1</b>
	Graduate	2	<b>0.2</b>
	Total	1315	<b>100</b>
<b>Mother</b>			
<b>Occupation</b>	Housewife	1062	<b>80.8</b>
	Civil Cervant	134	<b>10.2</b>
	Worker	54	<b>4.1</b>
	Others	65	<b>4.9</b>
	Total	1315	<b>100</b>
<b>Father Education</b>	Illiterate	10	<b>0.8</b>
	Elementary school	246	<b>18.7</b>
	Secondary school	309	<b>23.5</b>
	High school	457	<b>34.8</b>
	University	276	<b>21.0</b>
	Graduate	17	<b>1.3</b>
	Total	1315	<b>100</b>
<b>Father Occupation</b>	Own work	297	<b>22.6</b>
	Civil Cervant	496	<b>37.7</b>
	Worker	330	<b>25.1</b>
	Others	192	<b>14.6</b>
	Total	1315	<b>100</b>
<b>Income</b>			
	0-500 TL	79	<b>6.0</b>
	501-1000 TL	396	<b>30.1</b>
	1001-2000 TL	574	<b>43.7</b>
	2001-3000 TL	178	<b>13.5</b>
	3001-4000 TL	53	<b>4.0</b>
	4001-5000 TL	17	<b>1.3</b>
	5001-6000 TL	7	<b>0.5</b>
	6001-7000 TL	2	<b>0.2</b>
	Above 7000 TL	9	<b>0.7</b>
	Total	1315	<b>100</b>

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<b>Socioeconomic</b>			
<b>Status</b>	Low	632	<b>48.1</b>
	Middle	683	<b>51.9</b>
	Total	1315	<b>100</b>

### **3.3. Data Collection Instruments**

In this part, main data collection instrument, Fear Survey Schedule for Children, Fear Experiences Questionnaire which was used for the convergent validity study, questions designed to assess origins of fears and the demographic form were presented. Also, detailed information about Kuppuswamy's Socioeconomic Status Scale which was used to define the socioeconomic status of children and adolescents were given.

#### **3.3.1 Fear Survey Schedule for Children (FSSC)**

Based on adult fear survey schedules developed by Wolpe and Lange (1964), in 1968 Scherer and Nakamura developed Fear Survey Schedule for Children (FSSC). There are 80 items and 5 point-scale ranging from 1= none and 5= very much. In 1983, Ollendick introduced the revised version of FSSC with a 3 point-scale ranging from 1= none to 3= a lot to use the survey with children younger than 9 years. In addition five factors were reported in FSSC-R. They are; Fear of Failure and Criticism, Fear of Unknown, Fear of Minor Injury and Small Animals, Fear of Death and Danger and Medical Fears. FSSC-R was administered to an Australian sample of children by King et al. (1989). The item content of FSSC has not been changed since it was first developed in 1968. From those years many questions about children's fears raised. According to Gullone and King (1992) old version of survey had some lacks to measure fear of today's children. FSSC was revised for the second time (FSSC-II) and more

contemporary fear items were added. 3-point scale was changed to 1= not scared to 3= very scared. The FSSC-II was revised in Australia and administered to Australian children and adolescences. After 3 years, in 1995 Burnham validated the FSSC- II which was introduced in Australian context in United States. 20 contemporary items were added to FSSC-II and called FSSC-AM. First cross-national study was conducted with Australian children (Gullone & King, 1992; 1993) and American children (Burnham, 1995) by Burnham and Gullone in 1997. A modified version FSSC-R was introduced in Hawaii by Shore and Rapport (1998). 385 children from ages between 7 to 16 years were administered the survey. In 2002 reliability and validity study of the FSSC-HI was conducted with a large sample of Belgium adolescents aged 12-19.

In 1990, Erol and Şahin conducted adaptation study of Fear Survey Schedule for Children with Turkish children. Yule and Rowland (1987) revised Fear Survey Schedule for Children and used the revised version in a research study (Yule, Udwin & Murdoch, 1990). As it was mentioned in the previous chapter, that study was conducted with survivors of a cruise ship sink. Specific for that study, 17 new items related to fear of boat travel and fear of water were added to 80 items. For Turkish version, in the translation process interviews were conducted with children. New items related to religious fears, attachment relevant items and traffic accidents were added. Totally 110 itemed and 5 point Likert type Fear Survey Schedule for Children ranging from “I am not scared at all” to “I am scared a lot” was administered to children between the ages of 8 and 13 living in Turkey. Test-retest reliability of the survey on 40 children from the low socioeconomic status with an interval of two months was found to be  $r = .88$ . Convergent validity was tested with Rutter Parent and Teacher Scale (Erol & Özcebe, 1988) which assess the disorders at home and at school by the reports of parents and teachers. Although total correlation scores were

lower, according to teachers' reports the correlation between the items such as "having to go to school" etc. and conduct disorders was found to be  $r = .89$ , those items and the emotional dimensions was found to be  $r = .54$  and those items and the hyperactivity was found to be  $r = .47$ . Also the correlation between the fears related to religious beliefs reported by parents and reported by children was found to be  $r = .61$ , fears related to germs reported by parents and by children was found to be  $r = .49$ , fear of illness reported by parents and by children was found to be  $r = .72$  and lastly fear of death reported by parents and by children was found to be  $r = .66$ . Internal consistency was found to be  $\alpha = .96$  in the sample from low socioeconomic status and a  $\alpha = .94$  for the sample from high socioeconomic status. Item-total correlations ranged between .12 and .61.

In this study FSSC-AM (Burnham, 1995) was used, but there were 25 more items added by Burnham which have not been tested till this study. Total number of items was 123 with new added ones. There were two different versions of the surveys. First one was applied to grades 2 to 6 and including 118 items. Second survey was applied to grades 7 to 12 and including 123 items. 5 items were excluded in the survey of grades 2-6. The items 57, 61, 98, 120 and 121 were not appropriate to developmental characteristics of the children and adolescents between the ages of 8 and 13. Those items were "cults/satanic worship/voodoo", "my getting pregnant or my girlfriend getting pregnant", "being raped", "sex" and "sexually transmitted diseases". For the items, children were asked to rate themselves on a 3-point Likert type scale (1= *not scared*, 2= *scared*, 3= *very scared*) in terms of their fears.

Many research studies were conducted to clarify factor structure of FSSC. One-, five-, six- and seven- factor solutions were examined. Ollendick (1983) suggested a five-factor solution including Fear of Death and Danger, Fear of Failure and Criticism, Fear of Unknown, Fear of Small Animals and Medical

Fears. Shore and Rapport (1998) conducted a new factor analysis to new version of FSSC-R and suggested a seven-factor solution including Fear of Danger and Death, Fear of Unknown, Animal Fears, Anticipatory Social Fears, Aversive Social Fears, Social Confirmatory Fears and Worries. Muris and Ollendick (2002) conducted exploratory factor analysis to FSSC-HI and suggested five-factor solution including Fear of Death and Danger, Fear of Unknown, Animal Fears, Fear of Failure and Criticism and Medical and Situational Fears. The factor structure of FSSC was examined by Burnham (2005) by conducting an exploratory factor analysis. On the basis of previous studies (Ollendick, 1983; Gullone & King, 1992; Muris & Ollendick, 2000) a five-factor model (fear of death and danger, fear of unknown, school/social stress fears, animal fears and fear of criticism/ failure) was found with 98 items. Afterwards, Burnham and Giesen (2005) run a confirmatory factor analysis with a new data set. One- factor model did not fit the data well. The first three factors were quite similar for five- and six-factor models. Although five-factor model allows comparison with previous studies six-factor model clearly separated the fifth (medical fears) and the sixth (scary fears) factors. The fit indices indicated that six-factor model fit the data well ( $\chi^2/df$ -ratio= 3.0; CFI= 0.85, RMSEA= 0.04). Also they found moderate levels of internal consistency for Danger Fears Factor ( $\alpha$ = .96), Animal Fears Factor ( $\alpha$ = .88), Unknown Fears Factor ( $\alpha$ = .86), School Fears Factor ( $\alpha$ = .85) and Scary Fears Factor ( $\alpha$ = .67) and Medical Fears Factor ( $\alpha$ = .67).

Factor structure of Fear Survey Schedule for Children with Turkish sample was conducted by Erol, Şahin and Özcebe (1990). Since number of variables was limited with 100 in SPSS 8 version which was used for factor analysis, 12 of the items with the lowest total-item correlations were deleted. Factor analysis was conducted with 98 items. Principal component analysis with varimax rotation revealed 6 factors. Factors were Non-specific General Fear Factor with almost all items showed high loadings; Death, Natural disasters

and Religious Fears with items such as “death of parents”, “earthquakes”, “violating a religious rule” etc.; Fear of the Unknown with items such as “ghosts”, “being alone in a dark room”; Social Fears with items such as “taking examinations”, “talking to a stranger” etc.; Failure and Criticism with items such as “failing in an examination”, “to make a mistake” etc. and Medical Fears and Illness with items such as “hospital”, “going to dentist” etc.

### **3.3.2. Fear Experiences Questionnaire (FEQ)**

Fear Experiences Questionnaires (FEQ) developed by Gullone, King and Ollendick (2000). FEQ is consisted of 21 items and 4 subscales. Subscales are Social Evaluation and Psychic Stress (SEPS), Physiological Experiences (PE), Death and Danger (DD), Animal Fears (AF). The questionnaire is a 5 –point Likert type scale (1=*very often*, 2=*often*, 3=*sometimes*, 4=*almost never*, 5=*never*) in terms of how often they are scared and how their metabolism gives response to fear.

The validity and reliability of the Turkish version of the survey was investigated by Atılgan, Saçkes, Yurdugül and Çırak (2007). For construct validity, exploratory (NFI=.97, CFI=.98, RMSEA=.045), confirmatory (NFI=.97, CFI=.98, RMSEA=.047) and hierarchic factor analyses were conducted with a sample of 1087 adolescents aged between 12 and 17. For criterion -referenced validity, the correlation of the scale was examined with six scales. These were Beck Anxiety Inventory, Constant Anxiety Scale, State Anxiety Scale, Beck Depression Inventory, Submissive Acts Scale, and Rosenberg Self-Esteem Scale. the Pearson correlation coefficient between FEQ and Beck Anxiety Inventory was found as  $r = .59$  ( $p < .01$ ), FEQ and Constant Anxiety Scale was found as  $r = .51$  ( $p < .01$ ), FEQ and State Anxiety Scale was found as  $r = .32$  ( $p < .01$ ), FEQ and Beck Depression Inventory was found as  $r = .23$  ( $p < .01$ ), FEQ and Submissive

Acts Scale was found as  $r = .20$  ( $p < .01$ ) and FEQ and Rosenberg Self-Esteem Scale was found as  $r = -.33$  ( $p < .01$ ).

For reliability of the scale, test-retest Cronbach Alfa ( $\alpha$ ) and McDonald Omega ( $\omega$ ) coefficients were calculated. Cronbach Alpha reliability coefficients for subscales and for total scale were calculated. They were found for SEPS .83, for PE .77, for DD .76 and for AF .81. The Cronbach Alpha reliability for total FEQ scores was found .89. McDonald Omega coefficients for subscales and total scale were calculated. They were found for SEPS .83, for PE .78, for DD .77 and for AF .81. McDonald Omega coefficient for total FEQ scores was found .94.

### **3.3.3. Origins of Children's Fears Questions**

Rachman (1977, 1991) developed the three-pathway theory on the role of learning experiences in the acquisition of fears and phobias. This theory suggested that there were three ways of learning fears and phobias. They were classical conditioning which referred to direct exposure to fearful or phobic object or event; modeling which referred to vicarious learning of fear or phobia and negative information transmission which referred to exposure to negative information about the fearful or phobic object or event. Muris, Merckelbach and Collaris (1997) developed separate questions on the role of conditioning, modeling and negative information in the development of children's fears.

In this study, questions originated from the study of Muris et. al. (1997) were used. Participating children and adolescents were asked to write their 5 most fearful things and to degree their fear. Then they were asked questions about conditioning (Did you have a fearful experience with ....?), modeling (Did you know someone who are also afraid of ...?) and negative information (Did you hear frightening things about ...?). Also questions

were asked to investigate if conditioning (Did experiencing a fearful thing with this object cause you become more fearful?), modeling (Did knowing someone who are also afraid of this object cause you become more fearful?) and negative information (Did hearing frightening things about this object cause you become more fearful?) played a role on the intensification of the fear.

### **3.3.4 Demographic Form**

The information about age, gender, grade, number of siblings, family income, parent education and parent occupation of the participants were gathered by Demographic Form.

### **3.3.5.Kuppuswamy's Socioeconomic Status Scale**

Kuppuswamy's Socioeconomic Status Scale providing total score of monthly income, education of the head of the family and profession of the head and the score ranges between 3 and 29.

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#### **Education Score**

<i>Status</i>	<i>Point</i>
Professional or Honours	7
Graduate or Post-Graduate	6
Intermediate or Post-High-School Diploma	5
High School Certificate	4
Middle School Certificate	3
Primary School or literate	2
Illiterate	1

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#### **Occupation Score**

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<i>Status</i>	<i>Point</i>
Profession	10
Semi-Profession	6
Clerical, Shop-owner, Farmer	5
Skilled worker	4
Semi-skilled worker	3
Unskilled worker	2
Unemployed	1

#### **Family Income Per Month (in TL) Score**

<i>Status</i>	<i>Point</i>
>7000	12
6001-7000 TL	11
5001-6000 TL	10
4001-5000 TL	8
3001-4000 TL	6
2001-3000 TL	4
1001-2000 TL	3
501- 1000 TL	2
0-500 TL	1

<i>Total Score Socioeconomic Class</i>	<i>Point</i>
Upper	26-29
Upper middle	16-25
Lower middle	11-15
Upper lower	5-10
Lower	<5

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### **3.4. Data Collection Procedure**

Firstly, ethics approval from Middle East Technical University Human Subjects Ethics Committee was obtained in order to start the research. After receiving the permission from METU, in order to collect data in public schools, the aim and method of the research was presented to Ministry of Education. Permission to start data collection was obtained from Ministry of Education. The schools determined by the researcher were approved by education specialists in Ministry of Education. Pre-determined schools were visited to inform directors and school counselors about the aim, method and procedure of the study. Then, volunteer participation forms of the participants and parents' informed consents were obtained. After obtaining required permissions, firstly in classrooms, Fear Survey Schedule for Children (FSSC), Fear Experiences Questionnaire (FEQ) and a demographic form were administered to sample one twice with three weeks interval. Children and adolescents answered the questions during a class hour (50 minutes). After that for the main study Fear Survey Schedule for Children (FSSC), questions designed to assess origins of fears of children and a demographic form were administered to second sample. Optics forms were used and participants were given a class hour and a break, totally 60 minutes to answer the questions.

### **3.5. Data Analysis Procedure**

Firstly, for face validity, expert opinion was gathered. Then, for construct validity, exploratory factor analysis was conducted and convergent validity was tested and for convergent validity, the correlation of Fear Survey Schedule for Children with Fear Experiences Questionnaire was examined. For reliability, test-retest reliability and internal consistency reliability were examined.

Secondly, socioeconomic statuses of children were examined by Kuppuswamy's (1981) Socioeconomic Status Scale. Then, MANOVA was

conducted in order to test whether gender, age and socioeconomic status differ from each other in terms of fear content, fear intensity and fear frequency for different factors of fear. Lastly, origins of children's and adolescents' fears were examined and whether those origins played a role on the intensification of the fear was investigated.

### **3.5.1 Assumption Checks**

In order to test the construct validity of the scale and clarify the factor structure, exploratory factor analysis (EFA) was conducted. Before conducting the exploratory factor analysis, assumptions of EFA were checked. First, the sample size needs to be enough to conduct EFA. According to Hair, Anderson, Tatham and Black (1998)  $N/p \geq 10$ , in the current study, this ratio was 11.14, therefore the sample size was enough.

Second, all the variables were metric.

Third, Hair et al. (1998) suggested that the correlation coefficients should be higher than .30. In the present study, although most of the correlation coefficients in the correlation matrix were not large, the Bartlett test of sphericity was significant meaning that there were correlations at least some of the variables. Fourth, the Kaiser–Meyer–Olkin value was .96 providing evidence for multivariate normality and sampling adequacy for factor analysis (Field, 2005).

Prior to main analyses, assumptions were checked. The main assumptions for MANOVA were independence of observations, multivariate normality and homogeneity of variance and population covariance matrix for dependent variables. All the assumptions were tested with regard to the tests and criteria suggested by Tabachnick and Fidell (2007).

First the scores of the participants on the variables were independent of each other and independence of observation assumption was met. Second, univariate normality was tested for dependent variables, since SPSS cannot offer a test for examining multivariate normality. Skewness and Kurtosis values, histograms and Q-Q plots, Shapiro- Wilk's W test, Kolmogorov-Smirnov D tests were used to test univariate normality. As a result of testing univariate normality, Skewness values was closed to 1, Shapiro- Wilk's W test and Kolmogorv- Smirnov D test were significant and visual inspection of both histograms and normality plots indicated that there is a normal distribution of scores. Then, homogeneity of variance matrix for dependent variable was tested through Leven's test. It was found that the error variance of the dependent variable is not equal across the groups. Thus, homogeneity of variance assumption was not met. Alpha level was set as .01 for determining the significance of variables. Homogeneity of covariance matrix assumption was violated, as indicated by significant Box's M test, so Pillai's trace was selected for interpretation of multivariate results.

### **3.6. Variables**

**Fear:** In this study the content, frequency and intensity of fear was measured by the total scores obtained from Fear Survey Schedule for Children.

**Origins of fear:** In this study the origins of children's and adolescences' was measured by the total scores obtained from the questions asked for modeling, conditioning and negative information transmission.

**Gender:** A dichotomous variable with categories of (1) female and (2) male.

**Age:** Children and adolescents between the ages 8 and 18 were attended in this study.

**Socioeconomic status:** SES of children and adolescents were defined by Kuppuswamy's (1981) Socioeconomic Status Scale.

### **3.7. Limitations of the Study**

As well as the strength of the study, it has some limitations. Some of them are listed. Firstly, for the assessment of children's and adolescents' fears and origins of their fears self-report measures were used. Generally self-report tools carry the problem of social desirability and this may confound the results. Beside self-report, information from other sources such as parents, teacher and peers should be gathered.

Secondly, data were collected from the elementary and high schools in Ankara via convenient sampling. Therefore, the generalizability of the results is limited to the children and adolescents aged between 8 and 18 from the participating schools in Ankara and coming from mostly low and middle socioeconomic status.

Thirdly, in this study Fear Survey Schedule for Children (FSSC) was adapted to Turkish. Since the survey was unstandardized, to eliminate this limitation reliability and validity assessments of FSSC was performed for the present data. However, it is needed to test the measure with diverse samples.

Finally, this study should be read as an exploratory study examining the nature, severity, and origins of the fears of the Turkish children and adolescents. The results of the study should be cross validated before especially considering the fact that fears may vary based on the culture and current social and political atmosphere in a society lived in.

## **CHAPTER IV**

### **RESULTS**

This chapter presents the procedures and results of analyses conducted through parametric statistical techniques.

The aim of this study was examining the fear content, intensity and frequency of children and adolescents living in Turkey with regard to age, gender and socioeconomic status. Also origins of children's and adolescents' fears were another interest of the study. In order to reach the aims of the study, answers of the following research questions which were constructed based on the literature were examined and reported below.

#### Research Questions:

- 1) Is Turkish version of Fear Survey Schedule for Children a valid and reliable instrument with Turkish children and adolescent sample?
- 2) Is there any difference between different gender, age and socioeconomic status groups in terms of Five Fear Factors, in fear intensity scores?

#### More specifically;

- a) Are there gender differences between female and male children and adolescents from low and middle socioeconomic status living in Turkey, ages 8-18, in fear intensity scores?

- b) Are there age differences between female and male children and adolescents from low and middle socioeconomic status living in Turkey, ages 8-18, in fear intensity scores?
  - c) Are there socioeconomic status differences between female and male children and adolescents from low and middle socioeconomic status living in Turkey, ages 8-18, in fear intensity scores?
- 3) What are the most common fears endorsed by female and male children and adolescents between the ages 8 and 18 from low and middle socioeconomic status living in Turkey?
  - 4) What are the origins of children's fears living in Turkey?
  - 5) Are the origins of the children's and adolescents' fears intensifying their fears?

#### **4.1. Examining Reliability and Validity of Fear Survey Schedule for Turkish Children and Adolescents**

Before starting the main study, reliability and validity of Fear Survey Schedule for Children was examined with Turkish children and adolescents.

##### **4.1.1. Validity of Fear Survey Schedule for Children**

###### *Face Validity*

The translation of the questionnaire was done by three counselors advanced in English and an English teacher studying counseling psychology. After all of the translations were completed, they were compared and for all of the items most consistent ones were chosen. With regard to the translations a

Turkish version of Fear Survey Schedule for Children was formed. The Turkish form of the questionnaire was evaluated by two independent counseling psychology experts and two independent child psychology experts. Some words were changed according to the developmental levels. Lastly, two Turkish literature teachers checked the Turkish version of the questionnaire and they suggested some changes in wording and punctuation. The pilot study was conducted to check the clearness of the scale. No changes were suggested. Sample items from the Turkish adaptation of FSSC were presented in Appendix A.

### *Construct Validity*

Construct validity of FSSC was examined through convergent validity and exploratory factor analysis.

- *Convergent Validity*

Fear Experiences Questionnaire (FEQ) was used for convergent validity study of Fear Survey Schedule for Children (FSSC). The Pearson correlation coefficient between FSSC and FEQ was found as  $r = -.64$  ( $p < .01$ ) for the first application and  $r = -.67$  ( $p < .01$ ) for the second application which shows a strong correlation (Green, Salkin, & Akey, 2000). They were negatively correlated, because in FSSC which is a 3 –point Likert type scale 3 means “very scared” and in FEQ which is a 5 –point Likert scale 5 means “never”.

Table 3.3.

*Correlation between FSSC and FEQ (First and Second Application)*

		<b>FSSC Total scores</b>	<b>FEQ Total scores</b>
<b>For First Application FSSC Total scores</b>	Pearson Correlation	1	-,673(**)
	Sig. (2-tailed)		,000
	N	355	355
<b>For Second Application FSSC Total scores</b>	Pearson Correlation	1	-,648(**)
	Sig. (2-tailed)		,000
	N	355	355

\*\* Correlation is significant at the 0.01 level (2-tailed).

- *Exploratory Factor Analysis*

In previous studies factor structure of FSSC-AM was clarified with 98 items. In this study there were 123 items and factor structure of this new scale has not been examined yet.

Results of the principal component analysis with varimax rotation revealed five factors explaining 39% of the total variance. However, the items loaded to these 5 factors randomly and did not form a consequential factor structure. The factor loadings of the items ranged from .09 and .72 (Table 3.3). Nine items had factor loadings which were lower than .30 (.091, .183,

.210, .237, .248, .252, .259, .273, .293). According to Hair et al. (1998) items with factor loadings of lower than .30 should be eliminated. These items were excluded.

Items which were asked only for children between the ages 14 and 18 (Cults/ Satanic Worship /Voodoo, My getting pregnant or my girlfriend getting pregnant, Rape, Sex, Sexually transmitted diseases) were excluded from factor analysis.

Four of the factors were very similar to findings with study of Burnham (2005) with 98 items. They were named as Fear of Death and Danger, Fear of Unknown, School and Social Stress Fear and Fear of Animals. Last factor included items similar to the findings with study of Muris and Ollendick (2002) with 84 items. It was named as Medical and Situational Fears.

Table 3.4.  
*The Factor Loadings of FSSC*

	<b>Factor 1</b>	<b>Factor 2</b>	<b>Factor 3</b>	<b>Factor 4</b>	<b>Factor 5</b>
<b>Factor 1</b>					
<b>Fear of Danger and Death</b>					
Shootings	<b>,721</b>	,203	,041	,204	,083
Terrorist attacks	<b>,681</b>	,199	,117	,270	-,014
Being hit by a car or truck	<b>,673</b>	,156	,076	,137	,095
Drive-by shootings	<b>,663</b>	,193	,112	,255	,032
Being kidnapped	<b>,653</b>	,257	,101	,157	-,017
Murderers	<b>,652</b>	,301	,134	,276	-,074
Drowning	<b>,638</b>	,097	,106	,171	,188
Being threatened with a gun	<b>,630</b>	,286	,097	,211	,077
Taking dangerous/ bad drugs	<b>,617</b>	,222	,173	,012	,058
Going to jail	<b>,613</b>	,199	,282	,197	-,031
Gangs	<b>,610</b>	,380	,046	,249	,008

Earthquakes	<b>,598</b>	,211	,132	,199	,195
Nuclear war	<b>,598</b>	,032	,142	,104	,065
AIDS	<b>,595</b>	-,089	,179	,141	,111
Snipers at school	<b>,593</b>	,340	,185	,160	-,054
Falling from high places	<b>,592</b>	,181	,186	,096	,246
Going to juvenile system	<b>,587</b>	,135	,300	,243	,010
Tornadoes /hurricanes	<b>,583</b>	,274	,153	,214	,078
Getting a serious illness	<b>,581</b>	,061	,257	,034	,154
A burglar breaking into our house	<b>,580</b>	,343	,163	,268	,038
Fire	<b>,573</b>	,156	,184	,282	,103
Myself dying	<b>,563</b>	,280	-,015	,025	,094
Breaking a bone	<b>,561</b>	,209	,166	,181	,143
Getting an electric shock	<b>,559</b>	,296	,171	,206	,088
Not being able to breathe	<b>,557</b>	,090	,239	,019	,199
Dead people	<b>,545</b>	,320	,085	,199	,148
Our country being invaded by enemies	<b>,545</b>	,024	,152	,101	,041
Getting lost in a strange place	<b>,544</b>	,400	,179	,245	,124
People carrying guns, knives and weapons	<b>,534</b>	,429	,100	,253	,017
Robberies	<b>,528</b>	,265	,240	,211	,043
Car wreck /car accident	<b>,519</b>	,080	,198	,144	,047
Being bullied	<b>,518</b>	,394	,282	,230	,010
Someone in my family having an accident	<b>,498</b>	-,091	,356	-,010	,141
Crime	<b>,486</b>	,140	,373	,082	-,036
Someone in my family dying	<b>,481</b>	-,193	,239	-,009	,146
Sharks	<b>,474</b>	,148	,121	,458	,135
My parents separating or getting divorced	<b>,464</b>	,125	,352	-,114	-,035
Having an operation	<b>,460</b>	,127	,141	,154	,347
Drunk people	<b>,458</b>	,439	,160	,326	,023
Thunderstorms	<b>,448</b>	,352	,069	,300	,038
Death of a close person (grandparents, best friend)	<b>,446</b>	-,215	,295	,021	,101
Abuse	<b>,443</b>	,018	,284	,277	-,018
Forest fires	<b>,439</b>	,256	,253	,144	,115
Going to Hell	<b>,430</b>	-,148	,222	,085	,090
Cemeteries /grave yards	<b>,418</b>	,398	,088	,139	,184
Having to fight in a war	<b>,415</b>	,257	-,019	,295	,030
Someone in my family getting sick	<b>,403</b>	-,032	,363	-,067	,196
Having bad dreams	<b>,392</b>	,360	,168	,124	,304
Swimming in deep water	<b>,330</b>	,258	,048	,107	,300
<i>Being in closed places</i>	<i>,293</i>	<i>,261</i>	<i>,101</i>	<i>,154</i>	<i>,279</i>

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**Factor 2**  
**Fear of Unknown**

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Getting punished by mom	,172	<b>,591</b>	,359	,013	,003
Strangers	,328	<b>,583</b>	,112	,131	,097
Violence on TV	,228	<b>,557</b>	,068	,140	,144
Getting lost in crowd	,421	<b>,534</b>	,101	,189	,118
Getting punished by dad	,226	<b>,529</b>	,370	,049	,041
Violence near my home	,496	<b>,525</b>	,180	,212	,011
Being alone at home	,151	<b>,497</b>	,072	,094	,320
The sight of blood	,264	<b>,480</b>	,167	,134	,216
Haunted houses	,355	<b>,463</b>	,131	,144	,178
Scary movies	,267	<b>,448</b>	,026	,166	,221
Strange looking people	,368	<b>,445</b>	,123	,208	,096
Driving	,014	<b>,427</b>	,113	,185	,367
Being sent to principal	,299	<b>,422</b>	,335	,016	-,017
Teachers	,003	<b>,397</b>	,135	,022	,177
Thunder	,109	<b>,395</b>	,062	,232	,365
Being in a fight	,362	<b>,394</b>	,176	,184	,038
Riots	,310	<b>,368</b>	,216	,125	,062
Smoking	,239	<b>,332</b>	,321	,057	-,080
<i>Meeting someone for the first time</i>	,098	,259	,039	,072	,195
<i>Having to talk in front of my class</i>	-,045	,252	,243	,102	,106
<i>Clowns</i>	-,124	,237	,084	,071	,225
<i>Being a lone</i>	,171	,210	,162	,071	,189
<i>God</i>	,091	-,183	,072	,015	,025

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**Factor 3**  
**School and Social Stress Fears**

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Being put down or criticized by others	,008	,023	<b>,611</b>	,134	,097
Failing a test	,255	,151	<b>,608</b>	,059	,075
Getting bad grades at school	,255	,106	<b>,608</b>	,014	-,015
Being a failure / Not successful	,197	-,015	<b>,592</b>	,067	,015
Being embarrassed	,168	,148	<b>,576</b>	,105	,076
Looking foolish	,219	,180	<b>,557</b>	,058	,037
Being talked about	,098	,322	<b>,540</b>	,105	,077
Being teased	-,048	-,007	<b>,524</b>	,109	,112
My parents putting me down	,248	,222	<b>,514</b>	,059	-,015
Having no friends	,254	,140	<b>,484</b>	,033	,092
My parents losing their jobs	,367	,032	<b>,483</b>	,017	-,048
Failing school	,380	,096	<b>,458</b>	,056	,068
Being poor	,216	,136	<b>,452</b>	,028	,002
Making mistakes	,256	,259	<b>,451</b>	,051	,145

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Not having enough money	,080	-,024	<b>,427</b>	,057	,099
My parents arguing	,345	,350	<b>,419</b>	,001	,048
Losing my friends	,209	-,040	<b>,415</b>	,150	,077
Breaking up with a boyfriend or girlfriend	,133	,156	<b>,362</b>	,097	,159
Getting my report card	-,090	,022	<b>,339</b>	,138	,291
Going to a new school	,162	,133	<b>,323</b>	,115	,186
<i>Having to go to school</i>	-,047	,079	,248	-,028	,168

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**Factor 4**  
**Fear of Animals**

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Lizards	,245	,228	,078	<b>,622</b>	,194
Insects	,258	,096	,132	<b>,611</b>	,151
Mice	,278	,056	,107	<b>,601</b>	,058
Rats	,246	,235	,139	<b>,595</b>	,021
Bats	,344	,220	,101	<b>,595</b>	,095
Spiders	,297	,069	,101	<b>,577</b>	,120
Reptiles	,339	,190	,063	<b>,537</b>	,219
Bears	,446	,179	,101	<b>,536</b>	,072
Snakes	,417	,173	,142	<b>,530</b>	,184
Tigers	,442	,084	,087	<b>,524</b>	,093
Bees	,117	,149	,126	<b>,474</b>	,404
Dogs	,125	,140	,042	<b>,401</b>	,345
Cats	-,113	,013	,131	<b>,395</b>	,270

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**Factor 5**  
**Medical and Situational Fears**

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Going to the dentist	,098	-,063	,130	,081	<b>,580</b>
Going to the doctor	,062	-,106	,020	,004	<b>,575</b>
Having to go to the hospital	,084	,212	,137	,023	<b>,559</b>
Getting a shot from a nurse or doctor	,129	,161	,091	,107	<b>,558</b>
Flying in a plane	,152	,298	,091	,093	<b>,401</b>
Taking a test	,056	,016	,353	,129	<b>,394</b>
Darkness	,225	,282	,053	,126	<b>,389</b>
Heights	,303	,315	,042	,097	<b>,370</b>
Ghosts or spooky things	,298	,299	,056	,209	<b>,351</b>
<i>Rides like the Scream Machine</i>	,229	,218	-,037	,125	,273
<i>Riding in a car or bus</i>	-,052	,085	,050	,073	,183

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Correlation between five factors; Factor I (Fear of Death and Danger), Factor II (Fear of Unknown), Factor III (School and Social Stress Fears), Factor IV (Animal Fears) and Factor V (Medical and Situational Fears) was investigated through Spearman's Rho. Results indicated that all five factors are positively correlated to each other. It can be concluded that any change (increase or decrease) in fear intensity scores of children and adolescents related to one of the five fear factors will result with change in other fear factors in the same direction.

Table 3.5

*Correlation between Five Fear Factors*

			Factor I	Factor II	Factor III	Factor IV	Factor V
Spearman's rho	Factor I	Correlation Coefficient	1,000	,794(**)	,630(**)	,711(**)	,548(**)
		Sig. (2-tailed)	.	,000	,000	,000	,000
		N		1315	1315	1315	1315
	Factor II	Correlation Coefficient		1,000	,612(**)	,636(**)	,553(**)
		Sig. (2-tailed)		.	,000	,000	,000
	N			1315	1315	1315	
	Factor III	Correlation Coefficient			1,000	,430(**)	,428(**)
		Sig. (2-tailed)			.	,000	,000
	N					1315	1315
	Factor IV	Correlation Coefficient				1,000	,568(**)
		Sig. (2-tailed)				.	,000
	N						1315
	Factor V	Correlation Coefficient					1,000
		Sig. (2-tailed)					.

#### **4.1.2. Reliability of Fear Survey Schedule for Children**

##### *Test-Retest Reliability*

In order to examine the test-retest reliability, the scale was administered to the same participants with three weeks interval. Pearson correlation coefficients between the first ( $M=223.18$ ;  $SD=40.89$ ) and second ( $M=224.80$ ;  $SD=39.54$ ) times was found as  $r = .97$  ( $p<.01$ ) for the total score.

##### *Internal Consistency Reliability*

The internal consistency of the items was tested by Cronbach alpha coefficient. For the total scale alpha coefficient obtained was .97. Factor 1 (Fear of Death and Danger) has an internal consistency of .96, Factor 2 (Fear of Unknown) has an internal consistency of .89, Factor 3 (School and Social Stress Fears) has an internal consistency of .87, Factor 4 (Fear of Animals) has an internal consistency of .89 and Factor 5 (Medical and Situational Fears) has an internal consistency of .74.

The convergent and face validity, exploratory factor analysis, test-retest reliability and internal consistency reliability of new version of Fear Survey Schedule for Children indicated that it can be used with Turkish children and adolescents between the ages of 8 and 18 as a valid and reliable instrument for research purposes. Five factors were suggested; Fear of Death and Danger, Fear of Unknown, School and Social Stress Fears, Animal Fears, Medical and Situational Fears.

#### **4.2. Age, Gender and Socioeconomic Status Differences in Fears of Children and Adolescents**

Second research question was “Is there any difference between different gender, age and socioeconomic status groups in terms of Five Fear Factors, in fear intensity scores?”

In order to answer the first research question, a 2 (gender) X 11 (age group) X 2 (socioeconomic status) between-subjects multivariate analysis of variance (MANOVA) was performed on five dependent variables: Factor 1 (Fear of Death and Danger), Factor 2 (Fear of Unknown), Factor 3 (School and Social Stress Fears), Factor 4 (Fear of Animals) and Factor 5 (Medical and Situational Fears). After that, as follow up study a 2 (gender) X 11 (age group) X 2 (socioeconomic status) between-subjects univariate analysis of variance (ANOVA) was performed for each dependent variables.

Means and standard deviations of the Fear of Death and Danger, Fear of Unknown, School and Social Stress Fears, Fear of Animals and Medical and Situational Fears with regard to age and gender were presented in Table 4.1.

Table 4.1.

*Means and Standard Deviations*

	Socioeconomic Status	Age	Female			Male		
			<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>
<b>Fear of Death and Danger</b>	From Low SES	8	2.67	.19	33	2.40	.45	29
		9	2.57	.32	33	2.21	.36	34
		10	2.47	.38	24	2.24	.43	21
		11	2.31	.52	29	2.10	.54	30
		12	2.28	.42	23	1.97	.29	27
		13	1.99	.50	19	1.67	.41	26
		14	2.31	.35	29	1.66	.31	32
		15	2.22	.37	26	1.72	.30	31
		16	2.20	.38	32	1.73	.33	29
		17	2.17	.38	38	1.82	.26	32
	18	2.18	.39	29	1.70	.29	26	
	Total	2.232	.42	315	1.93	.44	31	
	From Middle SES	8	2.62	.26	24	2.31	.37	28
		9	2.57	.36	26	2.55	.25	26
		10	2.56	.39	24	2.23	.35	34
		11	2.38	.44	27	2.11	.43	33
		12	2.11	.40	27	1.98	.48	34
		13	2.26	.33	44	1.78	.37	36
		14	2.20	.47	29	1.86	.46	29
		15	2.14	.39	32	1.70	.35	28
16		2.12	.30	27	1.86	.48	29	
17		2.10	.47	34	1.72	.37	41	
18	2.11	.37	33	1.67	.29	38		
Total	2.27	.42	327	1.96	.46	35		
<b>Fear of Unknown</b>	From Low SES	8	2.23	.29	33	1.96	.26	29
		9	1.95	.34	33	1.79	.33	34
		10	1.92	.31	24	1.67	.37	21
		11	1.80	.52	29	1.63	.41	30
		12	1.68	.43	23	1.37	.21	27
		13	1.32	.28	19	1.27	.30	26
		14	1.57	.31	29	1.25	.19	32

	15	1.58	.32	26	1.27	.24	31
	16	1.51	.27	32	1.27	.29	29
	17	1.41	.26	38	1.19	.09	32
	18	1.34	.22	29	1.22	.33	26
	Total	1.68	.43	315	1.44	.38	31
	From Middle SES						
	8	2.09	.35	24	1.79	.43	28
	9	2.01	.47	26	1.82	.38	26
	10	1.90	.37	24	1.61	.32	34
	11	1.87	.48	27	1.52	.34	33
	12	1.59	.31	27	1.41	.28	34
	13	1.52	.36	44	1.34	.26	36
	14	1.56	.38	29	1.40	.30	29
	15	1.50	.35	32	1.27	.22	28
	16	1.35	.26	27	1.43	.51	29
	17	1.39	.33	34	1.20	.29	41
	18	1.32	.24	33	1.17	.18	38
	Total	1.62	.43	327	1.43	.38	35
<b>School and Social Stress Fears</b>							
	From Low SES						
	8	2.20	.32	33	2.01	.37	29
	9	1.95	.34	33	1.87	.36	34
	10	2.00	.38	24	1.79	.36	21
	11	2.03	.45	29	1.86	.39	30
	12	1.90	.37	23	1.72	.29	27
	13	1.75	.41	19	1.65	.34	26
	14	1.98	.39	29	1.55	.27	32
	15	1.96	.30	26	1.64	.36	31
	16	1.92	.34	32	1.71	.34	29
	17	1.8	.36	38	1.69	.28	32
	18	1.80	.33	29	1.70	.38	26
	Total	1.95	.37	315	1.74	.36	31
	From Middle SES						
	8	1.95	.34	.24	1.88	.32	28
	9	2.03	.35	26	1.97	.30	26
	10	2.01	.38	24	1.86	.32	34
	11	1.90	.51	27	1.90	.42	33
	12	2.02	.31	27	1.82	.40	34
	13	1.88	.44	44	1.70	.39	36
	14	2.09	.43	29	1.81	.40	29

		15	2.13	.32	32	1.69	.44	28
		16	1.82	.27	27	1.82	.38	29
		17	1.85	.41	34	1.67	.38	41
		18	1.73	.42	33	1.62	.36	38
		Total	1.94	.40	327	1.79	.39	35
		<hr/>						
	<b>Fear of Animals</b>							
		From Low SES						
		8	2.27	.24	33	1.81	.41	29
		9	2.14	.39	33	1.63	.40	34
		10	2.08	.40	24	1.58	.41	21
		11	1.84	.65	29	1.51	.45	30
		12	1.80	.55	23	1.36	.27	27
		13	1.70	.60	19	1.24	.28	26
		14	1.85	.40	29	1.27	.25	32
		15	1.89	.56	26	1.33	.30	31
		16	1.84	.43	32	1.31	.30	29
		17	1.78	.49	38	1.40	.29	32
		18	1.83	.58	29	1.39	.36	26
		Total	1.92	.51	315	1.44	.38	31
		From Middle SES						
		8	2.16	.40	24	1.55	.35	28
		9	2.10	.50	26	1.61	.36	26
		10	2.06	.49	24	1.62	.40	34
		11	1.84	.56	27	1.40	.33	33
		12	1.80	.41	27	1.35	.36	34
		13	1.92	.43	44	1.33	.29	36
		14	1.66	.45	29	1.42	.41	29
		15	1.52	.37	32	1.21	.25	28
		16	1.71	.41	27	1.41	.46	29
		17	1.79	.44	34	1.26	.22	41
		18	1.75	.48	33	1.36	.39	38
		Total	1.84	.48	327	1.40	.37	35
		<hr/>						
	<b>Medical and Situational Fears</b>							
		From Low SES						
		8	1.68	.36	33	1.57	.40	29
		9	1.52	.40	33	1.34	.34	34
		10	1.56	.32	24	1.41	.35	21
		11	1.47	.43	29	1.35	.30	30

	12	1.36	.28	23	1.17	.21	27
	13	1.32	.41	19	1.18	.22	26
	14	1.52	.34	29	1.24	.28	<b>32</b>
	15	1.47	.32	26	1.24	.34	<b>31</b>
	16	1.54	.33	32	1.33	.28	<b>29</b>
	17	1.39	.31	38	1.40	.36	<b>32</b>
	18	1.49	.35	29	1.28	.22	<b>26</b>
	Total	1.49	.36	315	1.32	.32	<b>31</b>
From Middle SES							
	8	1.57	.44	24	1.19	.28	<b>28</b>
	9	1.47	.34	26	1.51	.48	<b>26</b>
	10	1.57	.41	24	1.32	.28	<b>34</b>
	11	1.56	.52	27	1.29	.35	<b>33</b>
	12	1.34	.22	27	1.17	.22	<b>34</b>
	13	1.36	.35	44	1.20	.21	<b>36</b>
	14	1.52	.45	29	1.45	.40	<b>29</b>
	15	1.47	.31	32	1.17	.23	<b>28</b>
	16	1.38	.33	27	1.32	.45	<b>29</b>
	17	1.52	.42	34	1.29	.34	<b>41</b>
	18	1.44	.33	33	1.26	.29	<b>38</b>
	Total	1.47	.38	327	1.28	.34	<b>35</b>

Pillai's trace was selected for interpretation of multivariate results because homogeneity of covariance matrix assumption was violated, as indicated by significant Box's M test. Since the assumption of equality of variances was violated according to Levene's Test, alpha level was set as .01 for determining the significance of variables.

MANOVA revealed a significant main effect for gender (Pillai's trace= .24,  $F(5,1267) = 82.99, p = .000, \eta^2 = .24$ , large effect), age (Pillai's trace= .52,  $F(50,6355) = 14.86, p = .000, \eta^2 = .10$ , medium effect), but not for socioeconomic status (SES) (Pillai's trace= .01,  $F(5,1267) = 2.57, p = .025$ ). A significant interaction between age and SES (Pillai's trace= .06,  $F(50, 6355) = 1.66, p = .006, \eta^2 = .01$ , small effect), gender and age (Pillai's trace= .09,  $F(50, 6355) = 2.35, p = .000, \eta^2 = .01$ , small effect) and age, gender and

SES (Pillai's trace = .057,  $F(50, 6355) = 1.47$ ,  $p = .008$ ,  $\eta^2 = .01$ , small effect) were found.

For univariate analysis, a significant main effect was observed for age ( $F(10,1271) = 40.08$ ,  $p = .000$ ,  $\eta^2 = .24$ , large effect) and gender ( $F(1,1271) = 252.64$ ,  $p = .000$ ,  $\eta^2 = .17$ , large effect) for Factor 1 (Fear of Death and Danger); a significant main effect was observed for age ( $F(10,1271) = 70.22$ ,  $p = .000$ ,  $\eta^2 = .35$ , large effect) and gender ( $F(1,1271) = 127.19$ ,  $p = .000$ ,  $\eta^2 = .09$ , medium effect) for Factor 2 (Fear of Unknown); a significant main effect for age ( $F(10,1271) = 7.19$ ,  $p = .000$ ,  $\eta^2 = .05$ , small effect) and gender ( $F(1,1271) = 69.86$ ,  $p = .000$ ,  $\eta^2 = .05$ , small effect) was observed on Factor 3 (School and Social Stress Fears); a significant main effect for age ( $F(10,1271) = 15.90$ ,  $p = .000$ ,  $\eta^2 = .11$ , medium effect) and gender ( $F(1,1271) = 379.95$ ,  $p = .000$ ,  $\eta^2 = .23$ , large effect) was observed on Factor 4 (Fear of Animals) and a significant main effect of age ( $F(10,1271) = 5.64$ ,  $p = .000$ ,  $\eta^2 = .05$ , small effect) and gender ( $F(1,1271) = 80.04$ ,  $p = .000$ ,  $\eta^2 = .06$ , medium effect) was observed on Factor 5 (Medical and Situational Fears).

Since there is a significant three-way interaction effect of age, gender and socioeconomic status on all of fear factors (Fear of Death and Danger, Fear of Unknown, School and Social Stress Fears, Medical and Situational Fears), main effects of age and gender, interaction effects of age-gender and age-socioeconomic status were not reported.

*The Relationship of Children's and Adolescents' Fear of Death and Danger (Factor 1) to Age, Gender and Socioeconomic Status*

Among all children and adolescents female children from low socioeconomic status (SES) at age 8 ( $M = 2.67$ ,  $SD = .19$ ) reported the highest level of fear scores and male preadolescents from low SES at age 14 ( $M = 1.66$ ,  $SD = .31$ ) reported the lowest level of fear scores for Fear of Death and Danger.

Among females, children from low SES at age 8 ( $M = 2.67$ ,  $SD = .19$ ) reported the highest level of fear scores and preadolescents from low SES at age 13 ( $M = 1.99$ ,  $SD = .50$ ) reported the lowest level of fear scores. Female children from low SES at age 8 reported significantly higher fear scores than females at age 11 and older, at age 9 reported higher level of fear than females at age 13, 15 and older and at age 10 reported higher level of fear than females at age 13 from the same SES. Similarly, female children from middle SES at age 8 reported higher level of fear than females at age 12 and older, at age 9 and 10 reported higher level of fear than females at age 12, 14 and 18 from the same SES.

Among males, children from middle SES at age 9 ( $M = 2.55$ ,  $SD = .25$ ) reported the highest level of fear scores and preadolescents from low SES at age 14 ( $M = 1.66$ ,  $SD = .31$ ) reported lowest level of fear scores. Male children from low SES at age 8 reported significantly higher level of fear than children at age 12 and older and children at age 9, 10 and 11 reported higher level of fear than children at age 13 and older. Similarly male children from middle SES at age 8 reported significantly higher level of fear than males at age 12 and older, at age 9 reported higher level of fear than males at age 11 and older, at age 10 reported higher level of fear than males at age 13 and older, at age 11 reported higher level of fear than males at age

13,15,17 and 18 and lastly male children at age 12 reported higher level of fear than males at age 18 from the same SES.

Among children and adolescents from low SES, females at age 8 ( $M= 2.67$ ,  $SD= .19$ ) reported the highest level of fear scores and males at age 14 ( $M = 1.66$ ,  $SD= .31$ ) reported the lowest level of fear scores. Among children and adolescents from middle SES, females at age 8 ( $M= 2.62$ ,  $SD= .26$ ) reported the highest level of fear scores and males at age 18 ( $M = 1.67$ ,  $SD= .29$ ) reported the lowest level of fear scores.

Figure 1

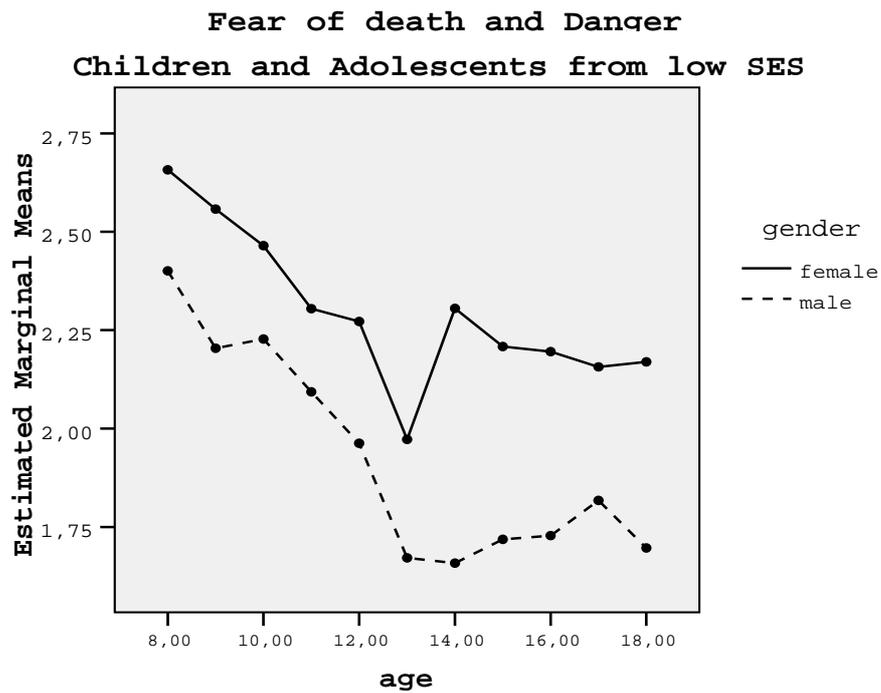
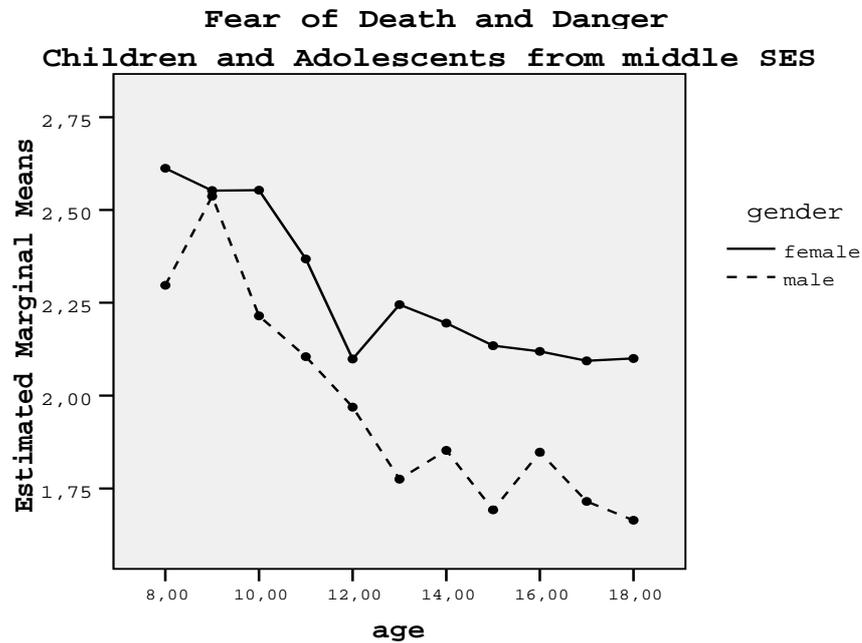


Figure 2



*The Relationship of Children's and Adolescents' Fear of Unknown (Factor 2) to Age, Gender and Socioeconomic Status*

Among all children and adolescents female children from low socioeconomic status (SES) at age 8 ( $M = 2.23$ ,  $SD = .29$ ) reported the highest level of fear scores and male adolescents from middle SES at age 18 ( $M = 1.17$ ,  $SD = .18$ ) reported the lowest level of fear scores for Fear of Unknown.

Among females, children from low SES at age 8 ( $M = 2.23$ ,  $SD = .029$ ) reported the highest level of fear scores and preadolescents from low SES at age 13 ( $M = 1.32$ ,  $SD = .28$ ) and adolescents from middle SES at age 18 ( $M = 1.32$ ,  $SD = .24$ ) reported the same and lowest level of fear scores. Female children from low SES at age 8 reported significantly higher level of fear than all of the other females from the same SES. Similarly, female children

from low SES at age 9 and 10 reported higher level of fear than females at age 13 and older, at age 11 reported higher level of fear than females at age 13, 16, 17,18 and at age 12 reported higher level of fear than females at age 18 from the same SES. Female children from middle SES at age 8, 9 and 10 reported significantly higher level of fear than females at age 12 and older from the same SES. Female children from middle SES at age 11 reported higher level of fear than females at age 13 and older from the same SES.

Among males, children from low SES at age 8 ( $M = 1.96, SD = .26$ ) reported the highest level of fear scores and adolescents from middle SES at age 18 ( $M = 1.17, SD = .18$ ) reported lowest level of fear scores. Male children from low SES at age 8 reported significantly higher level of fear than males at age 11 and older, at age 9 reported higher level of fear than males at age 12 and older, at age 10 and 11 reported higher level of fear than males at age 13 and older from the same SES.

Among children and adolescents from low SES, females at age 8 ( $M = 2.23, SD = .29$ ) reported the highest level of fear scores and males at age 17 ( $M = 1.19, SD = .09$ ) reported the lowest level of fear scores. Among children and adolescents from middle SES, females at age 8 ( $M = 2.09, SD = .35$ ) reported the highest level of fear scores and males at age 18 ( $M = 1.17, SD = .18$ ) reported the lowest level of fear scores.

Figure 3

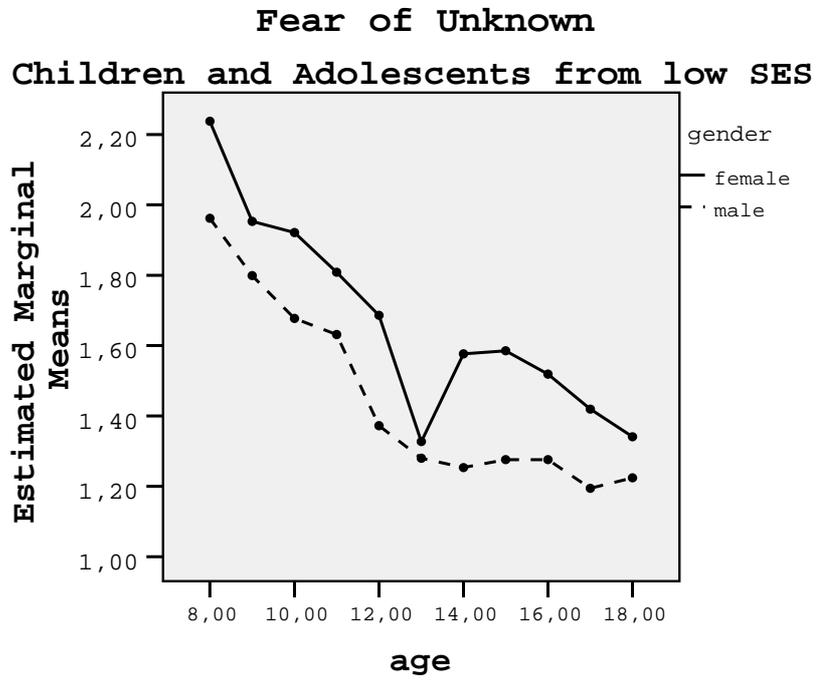
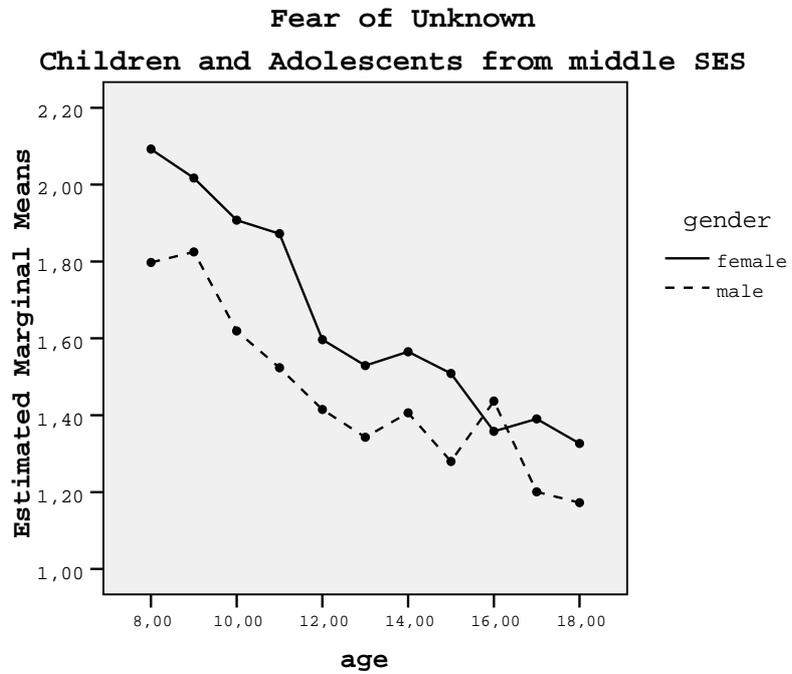


Figure 4



*The Relationship of Children's and Adolescents' School and Social Stress Fears (Factor 3) to Age, Gender and Socioeconomic Status*

Among all children and adolescents female children from low socioeconomic status (SES) at age 8 ( $M = 2.20$ ,  $SD = .32$ ) reported the highest level of fear scores and male preadolescents from low SES at age 14 ( $M = 1.55$ ,  $SD = .27$ ) reported the lowest level of fear scores for School and Social Stress Fears.

Among females, children from low SES at age 8 ( $M = 2.20$ ,  $SD = .32$ ) reported the highest level of fear scores and adolescents from middle SES at age 18 ( $M = 1.73$ ,  $SD = .42$ ) lowest level of fear scores. Female children from low SES at age 8 reported significantly higher level of fear than females at age 13, 17 and 18 from the same SES. Similarly, female children from middle SES at age 14 and 15 reported significantly higher level of fear than females at age 18 from middle SES.

Among males, children from low SES at age 8 ( $M = 2.01$ ,  $SD = .37$ ) reported the highest level of fear scores and preadolescents from low SES at age 14 ( $M = 1.55$ ,  $SD = .27$ ) reported lowest level of fear scores. Male children from low SES at age 8 reported significantly higher level of fear than males at age 13, 14, 15 and 17 and at age 9 reported higher level of fear than males at age 14 from the same SES. Male children from middle SES at age 9 reported significantly higher level of fear than males at age 18 from middle SES.

Among children and adolescents from low SES, females at age 8 ( $M = 2.20$ ,  $SD = .32$ ) reported the highest level of fear scores and males at age 14 ( $M = 1.55$ ,  $SD = .27$ ) reported the lowest level of fear scores. Among children and adolescents from middle SES, females at age 15 ( $M = 2.13$ ,  $SD = .32$ )

reported the highest level of fear scores and males at age 18 ( $M = 1.62, SD = .36$ ) reported the lowest level of fear scores.

Figure 5

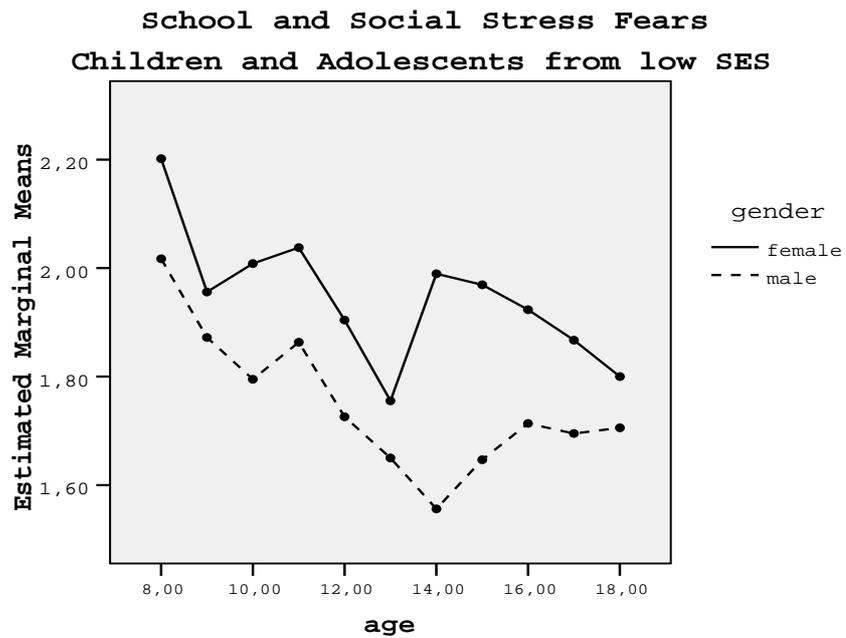
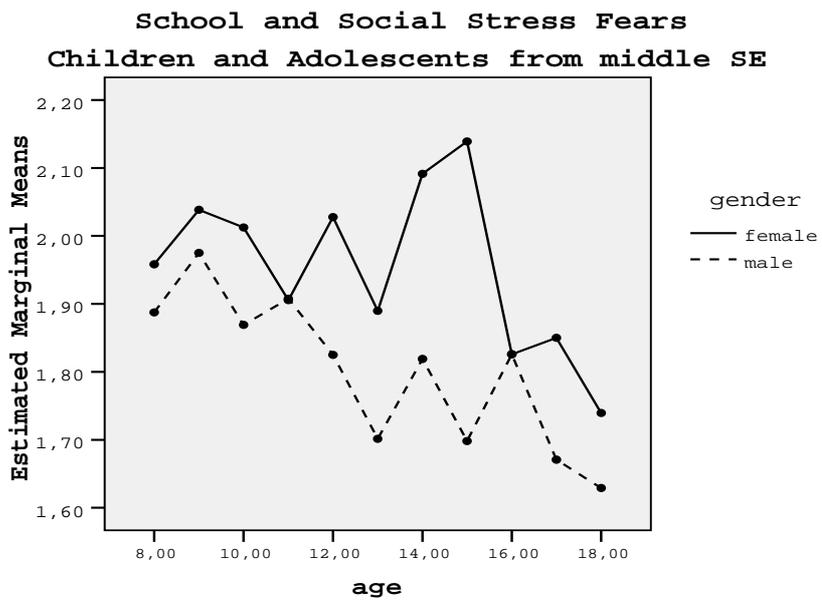


Figure 6



*The Relationship of Children's and Adolescents' Fear of Animals (Factor 4) to Age, Gender and Socioeconomic Status*

Among all children and adolescents female children from low socioeconomic status (SES) at age 8 ( $M = 2.27$ ,  $SD = .24$ ) reported the highest level of fear scores and male adolescents from middle SES at age 15 ( $M = 1.21$ ,  $SD = .25$ ) reported the lowest level of fear scores for Fear of Animals.

Among females, children from low SES at age 8 ( $M = 2.27$ ,  $SD = .24$ ) reported the highest level of fear scores and preadolescents from middle SES at age 15 ( $M = 1.52$ ,  $SD = .37$ ) reported the lowest level of fear scores. Female children from low SES at age 8 reported significantly higher level of fear than females at age 11 and older and at age 9 reported higher level of fears than females at age 13 and 17 from the same SES. Female children from middle SES at age 8 reported significantly higher level of fear than females at age 14 and older, at age 9 reported higher level of fear than females at age 14, 15 and 16, at age 10 reported higher level of fear than females at age 14 and 15 and lastly at age 13 reported higher level of fear than females at age 15 from the same SES.

Among males, children from low SES at age 8 ( $M = 1.81$ ,  $SD = .41$ ) reported the highest level of fear scores and adolescents from middle SES at age 15 ( $M = 1.21$ ,  $SD = .25$ ) reported the lowest level of fear scores. Male children from low SES at age 8 reported significantly higher level of fear than males at age 12 and older and at age 9 reported higher level of fear than males at age 13 and 14 from low SES. Male children from middle SES at age 9 and 10 reported significantly higher level of fear than males at age 15 and 17 from middle SES.

Among children and adolescents from low SES, females at age 8 ( $M= 2.27$ ,  $SD= .24$ ) reported the highest level of fear scores and males at age 13 ( $M = 1.24$ ,  $SD= .28$ ) reported the lowest level of fear scores. Among children and adolescents from middle SES, females at age 8 ( $M= 2.16$ ,  $SD= .40$ ) reported the highest level of fear scores and males at age 15 ( $M = 1.21$ ,  $SD= .25$ ) reported the lowest level of fear scores.

Figure 7

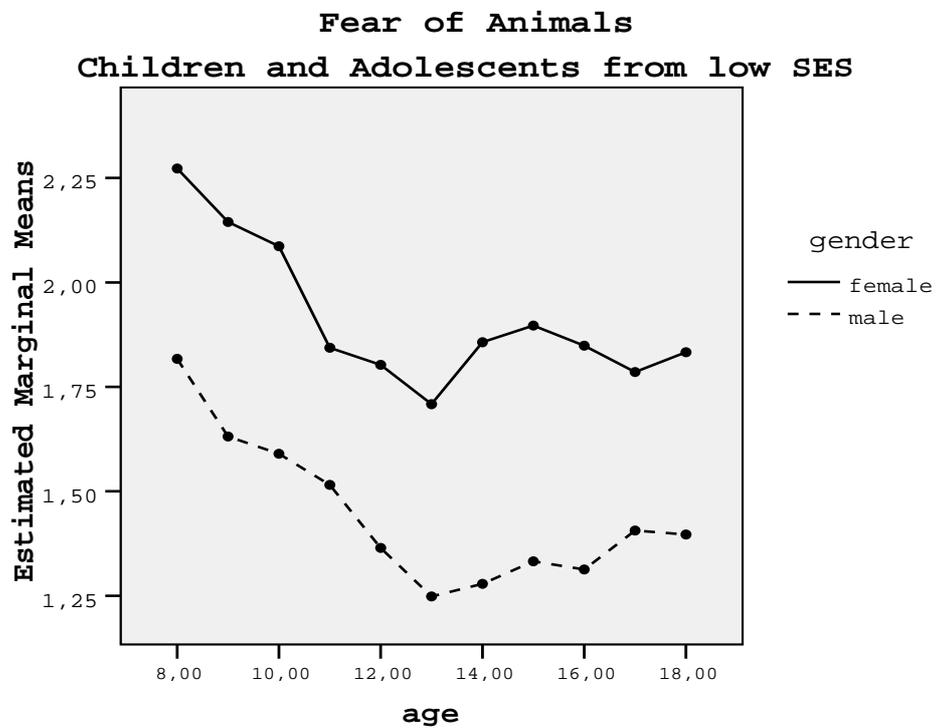
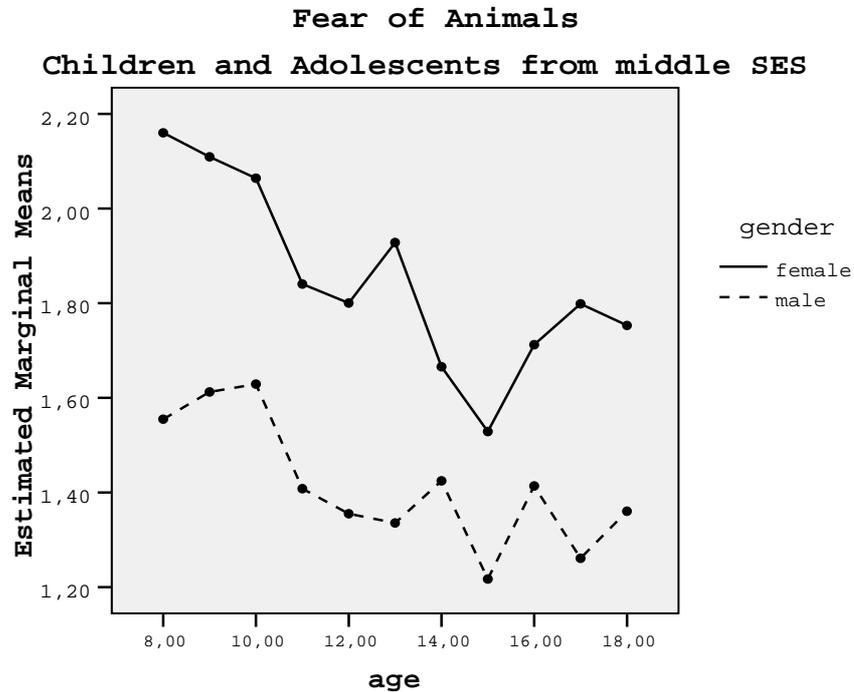


Figure 8



*The Relationship of Children's and Adolescents' Medical and Situational Fears (Factor 5) to Age, Gender and Socioeconomic Status*

Among all children and adolescents female children from low socioeconomic status (SES) at age 8 ( $M = 1.68$ ,  $SD = .36$ ) reported the highest level of fear scores and male preadolescents from middle SES at age 12 ( $M = 1.17$ ,  $SD = .22$ ) reported the lowest level of fear scores for Medical and Situational Fears.

Among females, children from low SES at age 8 ( $M = 1.68$ ,  $SD = .36$ ) reported the highest level of fear scores and preadolescents from low SES at age 12 ( $M = 1.36$ ,  $SD = .28$ ) lowest level of fear scores. Female children from low SES at age 8 reported significantly higher level of fear than females at age 12, 13 and 17 from low SES. There was no significant difference reported among age groups of females from middle SES.

Among males, children from low SES at age 8 ( $M = 1.57, SD = .40$ ) reported the highest level of fear scores and preadolescents from middle SES at age 12 ( $M = 1.17, SD = .22$ ) reported lowest level of fear scores. Male children from low SES at age 8 reported significantly higher level of fear than males at age 12, 13, 14 and 15. Male children from middle SES at age 8 reported significantly higher level of fear than males at age 9 and males at age 9 reported higher level of fear than males at age 12, 13 and 15 from middle SES.

Among children and adolescents from low SES, females at age 8 ( $M = 1.68, SD = .36$ ) reported the highest level of fear scores and males at age 12 ( $M = 1.17, SD = .21$ ) reported the lowest level of fear scores. Among children and adolescents from middle SES, females at age 8 ( $M = 1.57, SD = .44$ ) reported the highest level of fear scores and males at age 12 ( $M = 1.17, SD = .22$ ) reported the lowest level of fear scores.

Figure 9

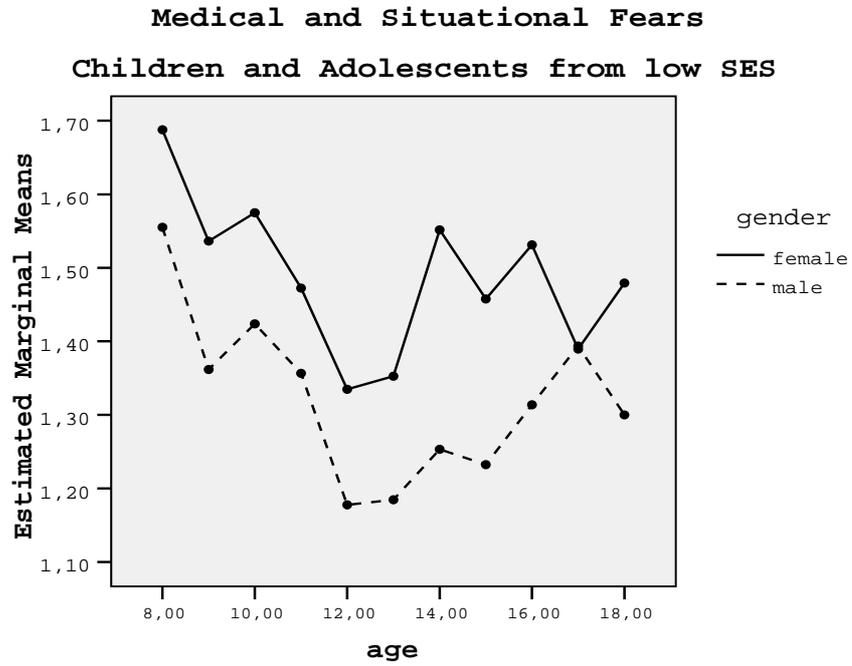
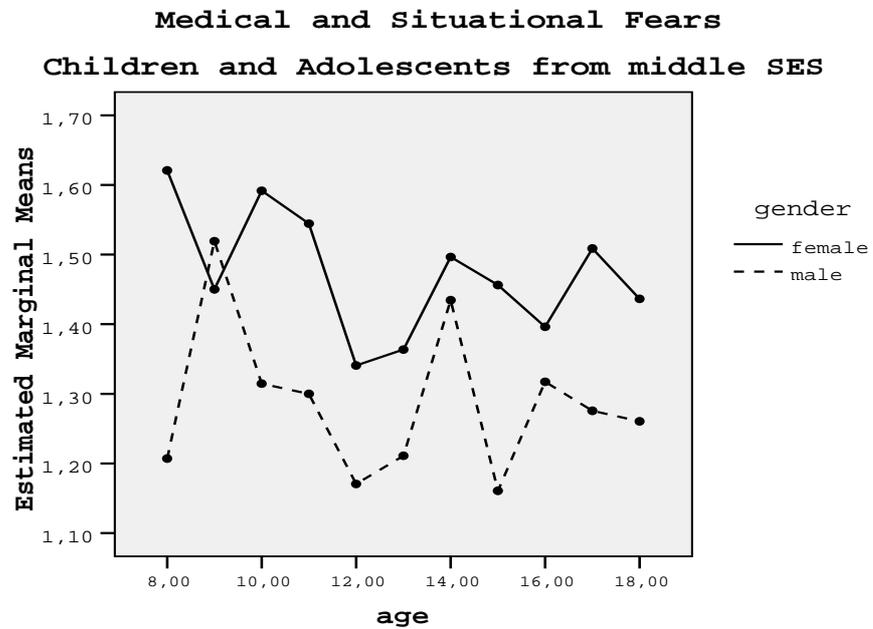


Figure 10



To conclude, it can be said that being female, from low socioeconomic status and young especially at age 8 is related to more intense fears, because, among all children for all of the fear factors female children from low socioeconomic status at age 8 reported the highest level of fear. Although socioeconomic status varies, the lowest fear intensity scores belong to male preadolescents or adolescents between the ages of 12 and 18 for all fear factors. Among females the highest fears scores were reported by children from low socioeconomic status at age 8 for all fear factors. Similarly except the fear intensity scores of Fear of Death and Danger, children from low socioeconomic status at age 8 reported the highest level of fear scores. Although socioeconomic status varies, among females and males preadolescents and adolescents, not children, reported the lowest level of fear.

Lastly, it should be mentioned that among genders and socioeconomic status fears of children at age 8, 9 and 10 were significantly different than fears of preadolescents and adolescents at various ages, but they were not significantly different than each other. Fears of preadolescents at age 11, 12 and 13 were significantly different than preadolescents at least 2 years older than themselves.

#### **4.3. Most Common Fears of Children and Adolescents**

Most common fears of children and adolescents were found with the highest frequency and percentage endorsement of “very scared” response choice as it was suggested in Gullone and King (1993) and Burnham and Gullone (1997).

Overall most commonly endorsed 10 fears of females were (1) someone in my family dying, (2) going to Hell, (3) death of a closed person (grandparent, best friend etc.), (4) abuse, (5) God, (6) failing school, (7)

AIDS, (8) someone in my family having an accident, (9) my parents separating or getting divorced and (10) terrorist attacks.

Overall most commonly endorsed 10 fears of males were (1) God, (2) going to Hell, (3) someone in my family dying, (4) death of a closed person (grandparent, best friend etc.), (5) my parents separating or getting divorced, (6) someone in my family having an accident, (7) Our country being invaded by enemies, (8) AIDS, (9)not being able to breath and (10) myself dying.

Most common fears of children and adolescents according to factors were shown in Table 4.2.

*Most Common Fears of Children and Adolescents among Factor 1 (Fear of Death and Danger)*

Most common fear of female children and adolescents was “someone in my family dying” (86.4%) and of male children and adolescents was “going to Hell” (74.9%). Among 10, 7 of most common fears were same for female and male children and adolescents, but “abuse”, “terrorist attacks” and “going to Juvenile system” were different for females while “myself dying”, “not being able to breathe” and “getting a serious illness” were different for males. One of the items which was excluded because of low factor loading, “being in closed places”, was the least fearful thing for both female (16.7%) and male (8.9%) children and adolescents.

Table 4.2

*Most Common Fears of Children*

<b>Factor 1</b>	<i>Female</i>			<i>Male</i>		
	<b>Item</b>	<i>f</i>	%	<b>Item</b>	<i>f</i>	%
<b>Fear of Death and Danger</b>	Someone in my family dying	543	86.4	Going to Hell	504	74.9
	Going to Hell	537	83.6	Someone in my family dying	493	73.3
	Death of a close person (grandparent, best friend)	505	78.7	Death of a close person (grandparent, best friend)	412	61.2
	Abuse	489	76.2	My parents separating or getting divorced	377	56.0
	AIDS	434	67.6	Someone in my family having an accident	354	52.6
	Someone in my family having an accident	424	66.0	Our country being invaded by enemies	302	44.9

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My parents separating or getting divorced	418	65.1	AIDS	293	43.5
Terrorist attacks	394	61.4	Not being able to breathe	275	40.9
Our country being invaded by enemies	382	59.5	Myself dying	253	37.6
Going to the juvenile system	380	59.2	Getting a serious illness	250	37.1
Being kidnapped	377	58.7	Drowning	241	35.8
Murderers	363	56.5	Going to the juvenile system	233	34.6
Going to jail	364	56.7	Nuclear war	229	34.0
Shootings	360	56.1	Abuse	227	33.7
Not being able to breathe	349	54.4	Going to jail	224	33.3
Dead people	348	54.2	Taking dangerous/bad drugs	219	32.5

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Drive-by shootings	344	53.6	Someone in my family getting sick	217	32.2
Drowning	344	53.6	Shootings	210	31.2
Car wreck/car accident	342	53.3	Being hit by a car or truck	209	31.1
Getting a serious illness	328	51.1	Dead people	208	30.9
Nuclear war	325	50.6	Snipers at school	207	30.8
Being hit by a car or truck	318	49.5	Car wreck/car accident	204	30.3
Snipers at school	309	48.1	Terrorist attacks	203	30.2
Myself dying	296	46.1	Falling from high places	202	30.0
Fire	294	45.8	Being kidnapped	202	30.0
Taking dangerous/bad drugs	289	45.0	Crime	192	28.5
Crime	287	44.7	Robberies	186	27.6
Gangs	244	38.0	Murderers	182	27.0

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A burglar breaking into our house	282	43.9	Drive-by shootings	181	26.9
Someone in my family getting sick	281	43.8	Tornadoes/Hurricanes	177	26.3
Tornadoes/Hurricanes	280	43.6	Sharks	156	23.2
Falling from high places	279	43.5	Earthquakes	156	23.2
Robberies	274	42.7	Breaking a bone	141	21.0
Sharks	265	41.3	Cemeteries/grave yards	137	20.4
Earthquakes	259	40.3	Fire	137	20.4
Being threatened with a gun	255	39.7	Being threatened with a gun	136	20.2
Getting lost in a strange place	244	38.0	Getting an electric shock	134	19.9
Breaking a bone	240	37.4	A burglar breaking into our house	134	19.9
Drunk people	225	35.0	Having an operation	132	19.6
Being bullied	215	33.5	Getting lost in a strange place	132	19.6

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Having an operation	213	33.2	Gangs	124	18.4
People carrying guns, knives, and weapons	211	32.9	Forest fires	121	18.0
Cemeteries/grave yards	200	31.2	Having bad dreams	112	16.6
Getting an electric shock	186	29.0	Swimming in deep water	110	16.3
Forest fires	178	27.7	People carrying guns, knives, and weapons	106	15.8
Swimming in deep water	171	26.6	Thunderstorms	95	14.1
Having bad dreams	167	26.0	Drunk people	89	13.2
Having to fight in a war	156	24.3	Being bullied	84	12.5
Thunderstorms	140	21.8	Having to fight in a war	62	9.2
Being in closed places	107	16.7	Being in closed places	60	8.9

**Factor 2**  
**Fear of**  
**Unknown**

God	475	74.0	God	514	76.4
Smoking	269	41.9	Smoking	219	32.5
Being sent to the principal	165	25.7	Being sent to the principal	154	2.49
Violence near my home	154	24.0	Getting lost in a crowd	94	14.0
Strange looking people	147	22.9	Haunted houses	90	13.4
Getting lost in a crowd	143	22.3	Strange looking people	88	13.1
The sight of blood	133	20.7	Violence near my home	83	12.3
Haunted houses	132	20.6	Getting punished by mom	79	11.7
Riots	130	20.2	Being Alone	73	10.8
Being in a fight	128	19.9	Getting punished by my dad	70	10.4

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Strangers	101	15.7	Strangers	65	9.7
Scary movies	98	15.3	Riots	65	9.7
Getting punished by my dad	94	14.6	The sight of blood	62	9.2
Getting punished by mom	91	14.2	Teachers	62	9.2
Being Alone	91	14.2	Being in a fight	50	7.4
Being alone at home	76	11.8	Scary movies	42	6.2
Violence on TV	65	10.1	Being alone at home	36	5.3
Thunder	54	8.4	Driving	35	5.2
Teachers	45	7.0	Violence on TV	32	4.8
Driving	38	5.9	Thunder	30	4.5
Meeting someone for the first time	28	4.4	Meeting someone for the first time	28	4.2
Clowns	22	3.4	Clowns	26	3.9
Having to talk in front of my class	21	3.3	Having to talk in front of my class	20	3.0

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**Factor 3**  
**School and**  
**Social Stress**  
**Fears**

Failing school	450	70.1	Failing school	338	50.2
My parents losing their jobs	290	45.2	My parents losing their jobs	257	38.2
Failing a test	287	44.7	Losing my friends	201	29.9
Getting bad grades at school	274	42.7	Getting bad grades at school	200	29.7
Being a failure/Not successful	268	41.7	Failing a test	200	29.7
Losing my friends	256	39.9	Being a failure/Not successful	186	27.6
Having no friends	202	31.5	Looking foolish	159	23.6
Looking foolish	200	31.2	Having no friends	147	21.8
My parents arguing	183	28.5	My parents putting me down	146	21.7
My parents putting me down	175	27.3	Breaking up with a boyfriend or girlfriend	137	20.4

Being embarrassed	166	25.9	Being embarrassed	116	17.2
Being poor	155	24.1	Being poor	116	17.2
Breaking up with a boyfriend or girlfriend	152	23.7	My parents arguing	106	15.8
Being talked about	144	22.4	Being talked about	102	15.2
Making mistakes	141	22.0	Making mistakes	93	13.8
Being put down or criticized by others	102	15.9	Being put down or criticized by others	71	10.5
Going to a new school	89	13.9	Not having enough money	70	10.4
Not having enough money	79	12.3	Going to a new school	58	8.6
Getting my report card	62	9.7	Getting my report card	52	7.7
Being teased	56	8.7	Having to go to school	42	6.2
Having to go to school	40	6.2	Being teased	31	4.6

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**Factor 4****Fear of  
Animals**

Snakes	311	48.4	Snakes	137	20.4
Tigers	256	39.9	Tigers	136	20.2
Bears	207	32.2	Bears	113	16.8
Reptiles	195	30.4	Reptiles	70	10.4
Bats	186	29.0	Bees	60	8.9
Mice	184	28.7	Bats	59	8.8
Spiders	180	28.0	Spiders	55	8.2
Lizards	175	27.3	Insects	52	7.7
Rats	171	26.6	Dogs	51	7.6
Insects	168	26.2	Rats	48	7.1
Bees	120	18.7	Lizards	44	6.5

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Dogs	96	15.0	Mice	37	5.5
Cats	48	7.5	Cats	21	3.1
<b>Factor 5</b>					
<b>Medical and Situational Fears</b>					
Ghosts or spooky things	176	27.4	Heights	111	16.5
Heights	150	23.4	Ghosts or spooky things	84	12.5
Darkness	98	15.3	Having to go to the hospital	48	7.1
Taking a test	78	12.1	Getting a shot from a nurse or doctor	47	7.0
Going to the dentist	73	11.4	Taking a test	44	6.5
Getting a shot from a nurse or doctor	73	11.4	Going to the dentist	40	5.9
Rides like the Scream Machine	68	10.6	Darkness	37	5.5

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Flying in a plane	56	8.7	Flying in a plane	35	5.2
Having to go to the hospital	53	8.3	Rides like the Scream Machine	27	4.0
Going to the doctor	24	3.7	Going to the doctor	14	2.1
Riding in a car or bus	7	1.1	Riding in a car or bus	8	1.2

*Most Common Fears of Children and Adolescents among Factor 2 (Fear of Unknown)*

Most common fear of female (74%) and male (76.4%) children and adolescents were same and it was “God”. The item loading of “God” was very low and it was not included in the Factor Analysis process, but the highest factor loading of “God” was in the Factor 2 and it was the most common fear of children and adolescents in Factor 2. Among 10, 7 of most common fears were same for female and male children and adolescents, but “the sight of blood”, “riots”, “being in a fight” were different for females while “getting punished by mom”, “getting punished by dad” and “being alone” were different for males. “Having to talk in front of my class” was the least fearful thing for both female (3.3%) and male (3.0%) children and adolescents. Similar with the item “God”, factor loadings of items “being alone” and “having to talk in front of my class” were low and not included in Factor 2.

*Most Common Fears of Children and Adolescents among Factor 3 (School and Social Stress Fears)*

Most common fear of female (70.1%) and male (50.2%) children and adolescents were same and it was “failing school”. Among 10, 9 of most common fears were same for female and male children and adolescents, but “my parents arguing” was different for females while “breaking up with a boyfriend or girlfriend” was different for males. “Having to go to school” was the least fearful thing for female (6.2%) and “being teased” was for male (4.6%) children and adolescents. The factor loading of the item “having to go to school” was low and not included in the Factor 3.

*Most Common Fears of Children and Adolescents among Factor 4 (Fear of Animals)*

Most common fear of female (48.4%) and male (20.4%) children and adolescents were same and it was “snakes”. There are 12 items in Factor 4 and among 5, 4 of most common fears were same for female and male children and adolescents, but “bats” was different for females while “bees” was different for males. “Cats” was the least fearful thing for female (7.5%) and male (3.1%) children and adolescents.

*Most Common Fears of Children and Adolescents Among Factor 5 (Medical and Situational Fears)*

Most common fear of females (27.4%) was “ghosts or spooky things and males (16.5%) was “height”. There are 11 items in Factor 5. Among 5, 3 of the most fearful things were same for female and male children and adolescents, but “darkness” and “going to dentist” were different for females while “getting a shot from a nurse or doctor” and “having to go to hospital” was different for males. “Riding in a car or bus” was the least fearful thing for female (1.1%) and male (1.2%) children and adolescents. The factor loading of the item “riding in a car or bus” was low and not included in the Factor 5.

#### **4.4. Origins of Children’s and Adolescents’ Fears**

Children and adolescents were asked to write their most intense five fears. “Losing my friends”, “being in closed places”, “God”, “someone in my family having an accident”, “someone in my family dying”, “my parents losing their jobs”, “not being able to breathe”, “going to the juvenile system”, “failing a test” and “being a failure” were reported in the list of most common fears.

Following the most intense fears children and adolescents were asked whether they learnt their most intense fears by modeling, negative information transmission and experience. Also they were asked whether these fear origins intensify their fears. For three fear origins (modeling, negative information transmission and experience) and the effect of three fear origins on the intensification of fear they gave 5 answers. For three origins and their intensifying effect 6575 (1315x5) results were given. (Table 4.3).

64.8% of all children reported that they learnt fear by modeling, 51.8% of all children reported they learnt fear by negative information transmission and 35.8% all of children reported they learnt fear by experiences (conditioning).

Children and adolescents were asked if modeling, conditioning and negative information transmission intensified their existing fear. 45.7% of all children and adolescents reported that negative information transmission intensified their fear, 49% of all children and adolescents reported that modeling intensified their fear and 44.8% of all children and adolescents reported that experience (conditioning) intensified their fear.

For female and male children and adolescents separately, way of learning fear was different from each other. 60.9 % of male and 69.2% of female children reported that they learnt fear by modeling, 49.6% of male and 51.2% of female children reported conditioning and 33% of male and 39 % of female reported negative information transmission.

Intensifying effects of modeling, negative information transmission and conditioning was different for female and male children and adolescents than each other. Also female and male children and adolescents reported the intensifying effects in different order. 44% of males reported that modeling

intensifies their fears, 43.8% reported conditioning and 38.7% reported negative information transmission while 54.8 % of females reported that conditioning intensifies their fears, 51.7 % reported negative information transmission and 48% reported modeling.

Table 4.3.

*Origins of Fears and Their Intensifying Effects*

		<b>All Children</b>		<b>Male</b>		<b>Female</b>	
		<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
<b>Experiences</b>	Modeling experiences	4263	64.8	2046	60.9	2217	69.2
	Information experiences	3409	51.8	1107	33.0	1244	39.0
	Conditioning experiences	2351	35.8	1662	49.6	1747	51.2
<b>Experiences intensifying fears</b>	Modeling experiences	3005	45.7	1471	44.0	1534	48.0
	Conditioning experiences	2943	44.8	1295	38.7	1648	51.7
	Information experiences	3219	49.0	1468	43.8	1751	54.8

## **CHAPTER V**

### **DISCUSSION**

The major aim of this study was to examine fears of children and adolescents in Turkey. To investigate fears of children and adolescents Fear Survey Schedule for Children was adapted in to Turkish. Second aim of this study was to examine the origins of children's and adolescents' fears.

This chapter demonstrates discussions in relation to the results derived from statistical analysis. The first section is devoted to the discussion the adaptation of Fear Survey Schedule for Children and investigation of children's and adolescents' fears. Also origins of their fears will be discussed. The second section provides implications drawn from the results of the study. Finally, the third section presents the recommendations for future study and practice.

#### **5.1. Discussion of the Findings**

In this section results are discussed in line with the relevant literature.

##### **5.1.1. Psychometric Properties of Fear Survey Schedule for Children**

Factor structures of Fear Survey Schedule for Children have been examined several times in different studies for different versions. Ollendick (1983) suggested five factor solution for Fear Survey Schedule for Children-

Revised. Five fear factors were Fear of Failure and Criticism, Fear of Unknown, Fear of Death and Danger, Fear of Injury or Small Animals and Medical Fears. Five factor solution of Gullone and King (1992) were similar with Ollendick's (1983) solution; Fear of Death and Danger, Fear of Unknown, Fear of Failure and Criticism, Animal Fears and Psychic Stress-Medical Fears. Although, Fear Survey Schedule for Children was designed to assess fears of children and adolescents in Australia, Burnham and Gullone (1997) tested reliability and validity with American sample. Five factors were Fear of Death and Danger, Fear of Unknown, Animal Fears, School/ Medical Fears and Fear of Failure and Criticism. Fear Survey Schedule for Children- Revised was revised for use in Hawaii and a seven-factor solution for Fear Survey Schedule for Children- Hawaii was suggested (Shore & Rapport, 1998). Factors were Fear of Death and Danger, Aversive Social fears, Fear of the Unknown, Animal Fears, Medical and Situational Fears, School Performance Fears and Anticipatory Social Fears. Muris and Ollendick (2002) suggested a new factor structure for Fear Survey Schedule for Children- Hawaii including five factors; Fear of Death and Danger, Fear of Failure and Criticism, Fear of Unknown, Animal Fears and Medical and Situational Fears. Factor structure of American version of Fear Survey Schedule for Children was examined by Burnham (2005) and a five factor solution was suggested. Five factors were Fear of Death and Danger, Fear of Unknown, Fear of Failure and Criticism, School /Social Stress Fears and Animal Fears.

One of the basic goals of the current study was to examine factor structures of Fear Survey Schedule for Children with a Turkish children and adolescent sample to summarize the nature of their fears. As it was mentioned before in this study a new version of the survey with 25 new items by Burnham was translated and administered to adolescents from

ages 14 to 18 as a 123 itemed and to children from ages 8 to 14 as a 118 itemed survey.

An exploratory factor analysis was conducted to examine factor structure for new version of FSSC- AM. Five factor solution was suggested. Four of the factors (Fear of Death and Danger, Fear of Unknown, Fear of Animals, School/ Social Stress Fears) were same with the findings of Burnham (2005) and a factor (Medical and Situational Fears) was same with the findings of Shore and Rapport (1998). Items such as “terrorist attacks”, “earthquakes” etc. were included in Fear of Death and Danger factor; “haunted houses”, “strange looking people” etc. were included in Fear of Unknown; “failing a test”, “looking foolish” etc. were included in School/ Social Stress Fears; “cats”, “dogs” etc. were included in Fear of Animals and “going to doctor”, “heights” were included in Medical and Situational Fears.

Interestingly, the item “sharks” was not loaded in the fourth factor, Fear of Animals, but in the first factor, Fear of Death and Danger. As it was suggested for various items in several studies for children and adolescents, in Turkey, too, they do not have a chance to see a real shark; they only may see a shark in a film, killing people (Burnham, 2005). For that reason children and adolescents may perceive sharks as a fatal danger.

Since factor loadings of these items “being in closed places” (Fear of Death and Danger); “meeting someone for the first time”, “having to talk in front of my class”, “clowns”, “being a lone”, “God” (Fear of Unknown); “having to go to school” (School/ Social Stress Fears) and “riding in a car or bus”, “rides like Scream Machine” (Medical and Situational Fears) were low, they were not included in the mentioned factors.

One of the most striking results was the low item loading of the item “God”, because this item was one of the most common items reported as “scared”

and “very scared” by children and adolescents. Turkey is a country in which many people experience the requirements of Islam deeply and also it should be considered that the sample of this study was children and adolescents coming from low and middle social class, so children and adolescents reporting “God” as one of the most common fears is not a surprising result. Since, this study was a correlational study; children’s and adolescents’ perceptions related to “God” cannot be examined. Further, yet, it can be speculated that children and adolescents may answer this item of survey according to their perception of “God” and they may have confusion between love and fear.

Sample of this study was children and adolescents between the ages 8 and 18, so face validity of Fear Survey Schedule for Children was provided by obtaining expert opinion and conducting a pilot study for assessing the appropriateness of the questionnaire to the age groups of the study. Moreover, many research studies suggested that female children and adolescents report higher level of fears than male peers (e.g. Gullone& King, 1992; Burnham, 2005). In a line with these findings, the current study found that female children and adolescents reported higher level of fears than male children and adolescents. By this way, predictive validity of this new version of Fear Survey Schedule for Children was met. As a proof of convergent validity the correlation between Fear Experiences Questionnaire (FEQ) and the new version of Fear Survey Schedule for Children to provide evidence for convergent validity was examined and provided evidence for the validity of the scale.

To mention the reliability of the new version of Fear Survey Schedule for Children, the survey schedule was administered to children and adolescents twice with three weeks interval. Test-retest reliability was calculated by Cronbach Alpha coefficient and found to be sufficiently good. Also, it was

found that new version of Fear Survey Schedule for Children had an internal consistency adequate for all of the factors (Fear of Death and Danger, Fear of Unknown, Fear of Failure and Criticism, Fear of Animals, Medical and Situational Fears).

In sum, all these findings support the reliability and the validity of new version of Fear Survey Schedule for Children to be use with Turkish children and adolescent sample.

### **5.1.2. Fears of Children and Adolescents with Regard to Age, Gender and Socioeconomic Status**

In the literature, fears of children and adolescents with regard to age, gender and socioeconomic status were examined frequently. For gender differences, it was reported female children and adolescents reported higher level of fears than male counterparts (Gullone and King, 1992; 1993; Burnham and Gullone, 1997; Ollendick, Yang, King, Dong and Akande, 1996; Svesson and Öst, 1999; Muris and Ollendick, 2002; Burnham, 2005; Meltzer, Vostanis, Dogra, Doos, Ford and Goodman, 2008). There was no exception for this result.

However, research studies examining fears of children and adolescents with regard to age report inconsistent results. In some of the studies, younger children reported higher level of fears. For example, in study of Gullone and King (1992) results indicated that youngest group (age 7-10) reported highest fear scores for total scores, scores of death and danger fear, the fear of unknown and animal fears. On the contrary, Burnham and Gullone (1997) suggested that oldest group (15-18 ages) reported highest fear scores for fear of animals.

Similarly, research findings indicating results about the fears of children and adolescents with regard to socioeconomic status have not been consistent. It was found that children and adolescents coming from low socioeconomic status reported higher level of fear (e.g. Jersild & Holmes, 1935) as well as children and adolescents coming from high socioeconomic status reported higher level of fear (e.g. Angelino, Dollins & Mech, 1956).

In this study, three-way the interaction of gender, age and socioeconomic status was found to be significant, so, the main effects of age and gender and interactions of age-gender and age-socioeconomic status were not reported.

For the first factor, Fear of Death and Danger and the second factor Fear of Unknown, as it was mentioned in the Results part in detail, female children from low socioeconomic at age 8 reported the highest fear intensity scores. For Fear of Death and Danger, the lowest scores were reported by male preadolescents from low socioeconomic status at age 14 while for Fear of Unknown scores male adolescents from middle socioeconomic status at age 18 reported the lowest level of fear. Female and male children from low and middle socioeconomic status at ages 8, 9 and 10 reported higher level of fears than their older counterparts.

For the third factor, School /Social Stress Fears the owner of highest fear scores did not change. Similar with the other factors, for this factor, too, male preadolescents reported the lowest fear scores. They were from low socioeconomic status and at age 14. Scores of young children at age 8, 9 and 10 were significantly different than oldest adolescents at age 17 and 18 for females and males from both of the socioeconomic status.

For the fourth factor, Fear of Animals and the last factor Medical and Situational Fears, same with the other factors female children from low

socioeconomic status at age 8 reported the highest level of fears. Male preadolescents from middle socioeconomic status reported the lowest level of fears for both of the factors.

In general, findings indicated that female gender, low socioeconomic status and young age result in more intense fears. For all fear factors (Fear of Death and Danger, Fear of Unknown, School and Social Stress Fears, Animal Fears and Medical and Situational Fears) females children from low socioeconomic status at age 8 reported the highest level of fear. Male preadolescents and adolescents coming from both low and middle socioeconomic status between the ages of 12 and 18 reported the lowest fear intensity scores for all fear factors. Similarly, for all fear factors, among females and males coming from low and middle socioeconomic status fears of children at age 8, 9 and 10 were significantly different than fears of preadolescents and adolescents at various ages, although they were not significantly different than each other. Fears of preadolescents at age 11, 12 and 13 were significantly different than preadolescents at least 2 years older than themselves.

Results of this study were consistent with the previous ones. For all factors highest scores were reported by female children and lowest scores were reported by male preadolescents and adolescents. As it was mentioned in previous studies females and younger children are more fearful than males and older children. Socioeconomic status and fear relationship was found consistent with some of previous studies. For instance, Fear of Death and Danger scores similar with previous studies children and adolescents from low socioeconomic status reported higher fear intensity scores.

### **5.1.3. Most Common Fears of Children and Adolescents**

As it was mentioned before, fears of children and preadolescents between the ages of 9 and 13 were investigated by Erol, Şahin and Özcebe (1990). Results indicated that most common fears of children were “Hell”, “death of my mother”, “death of my father”, “shot with firearm”, “hit by car or lorry” and “separation from parents”. In the present study, similar items such as “going to Hell”, “death of a closed person (grandparent, best friend etc.)”, “someone in my family having an accident”, “God” and “my parents separating or getting divorced” were reported in the most common fears list, but also items such as “abuse”, “AIDS”, “terrorist attacks” and “our country being invaded by enemies” were reported. This result supports the idea that children and adolescent have contemporary fears that may change with technological changes or negative life events such as man-made or natural disasters.

As it was aforementioned, female and male children and adolescents reported different fears in the most common fears list. In general male children and adolescents reported more self-oriented fears such as “myself dying” etc., and female children and adolescents reported more relationship-oriented fears such as “someone in my family dying” etc. This is very much related to masculine and feminine sides of individuals. As it is known even from very early studies (e.g. Bem,1974; Aries,1987; Sidanius, Cling & Pratto, 1991), masculinity deals with the strength of the self and it was not surprising that male children and adolescents reported fears related to self. Feminine side of the individuals developed on value, not valuing self, but the others. Anyway female children and adolescents reported fears related to others not the self.

#### **5.1.4. Origins of Children's and Adolescents' Fears**

Origins of children's and adolescents' fears have been examined according to biological, environmental and cognitive factors (Mineka & Öhman, 2002; Poulton & Menzies, 2002; Rachman, 1977; Seligman, 1971; Agras, Sylvester & Oliveau, 1969).

In this study Rachman's (1977) three pathways theory was followed to examine the origins of children's and adolescents' fears. The theory suggested three pathways; classical conditioning, modeling and negative information transmission to learn fear. Previous studies examining children's and adolescents' fears according to Rachman's (1977) three-pathway theory reported mixed results about the commonality of conditioning, modeling and negative information transmission in fear acquisition. Children and adolescents reported negative information transmission, conditioning and modeling in America (Muris et. al, 1997) as well as modeling, negative information transmission and conditioning in South Africa (Muris et. al, 2008), respectively. Also the intensifying effect of conditioning, modeling and negative information transmission on fears of children and adolescents was examined previously. Children and adolescents reported that negative information transmission, modeling and conditioning, respectively, intensify their existing fear. In this study, children and adolescents reported modeling (64.8%), negative information transmission (54.8%) and conditioning (35.8%) as their way of fear acquisition. This was result was consistent with the previous study (Muris et. al, 2008). Findings of the present study indicated that modeling (49%), negative information transmission (45.7%) and conditioning (44.8%) were reported to be intensifying children's and adolescents' fears. Children's and adolescents' ranking of negative information, modeling and conditioning for their intensifying effect were different than the previous study. For this

study the reason of such difference cannot be examined, only some reasons can be speculated. The reason behind this difference may be related to difference between South African and Turkish child rearing styles and attachment styles (Bornstein & Cote, 2006; Harkness & Super, 1992; Kagitcibasi, 1996).

## **5.2. Implications of Findings**

As it was mentioned before fear is an adaptive emotion and has a survival value, but it should be considered that fear may damage learning process and social interactions. Also, relationships of fear to anxiety, phobia and worry which may interfere with daily functioning were emphasized in the literature. Fear to the particular degree is normal and functional emotion for humans, but should be screened and assessed by parents, teachers and school counselors. Children and adolescents should be informed about the fears specific to their age and situation (such as victims of earthquakes). Normality and abnormality of fears should be taught to children and adolescents, in this way they may assess their own fears and protect themselves from negative effects of fear (such as reduction in learning capacity) which may help to prevent fears transition to anxiety, phobia and worry from fear. In this study, it was found that 64.8% of children and adolescents learn fears through modeling. At this point especially parents and teachers with school counselors have an important role to observe, to inform and to guide children and adolescents. Also negative information transmission was reported by 54.8% of children and adolescents as their way of fear acquisition. This result emphasizes the importance of informative and guiding activities specific for children and adolescents

The results of this study suggested that females are more fearful than males and also young children reported higher level of fears than older children and adolescents. Thus, females and children at primary school level seem to

be at more risk to pass anxiety, phobia or worry from fear. Therefore, prevention and treatment efforts should target these groups.

### **5.3. Recommendations for Future Research**

Research on fears of children and adolescents is a very wide area, so several recommendations can be done for future studies. Firstly, a new version of Fear Survey Schedule for Children with 123 items was introduced. An exploratory factor analysis was conducted to examine factor structure, but a confirmatory analysis was not conducted, because children and adolescents haven't been administered this version of Fear Survey Schedule for Children, yet. So, there was not a collected data to match with current data. Hence, in further studies, children and adolescents should be administered this new version and confirmatory factor analysis should be conducted to confirm factor structure for Turkish sample.

As it was mentioned before one of the most commonly endorsed fears, the item "God" was singled out in factor analyses, due to its low factor loading. Since religious beliefs have great importance in Turkey for many people, "fear of God" should be examined in a detailed study with children and adolescents. Perceptions and beliefs of children and adolescents related to "God" should be investigated to understand their fear of god.

In this study, children and adolescents were administered 123 items in 50 minutes including 10 minutes of break between two 20 minutes. Although they had a break, sometimes children and adolescents had difficulty in answering the questions. In future studies, the survey may be divided in parts, such as according to factors (Fear of Death and Danger, Fear of Unknown, Fear of Failure and Criticism, Fear of Animals and Medical and Situational Fears) and children and adolescents may be given the parts of survey in different days or in the same day with longer breaks. This may

result with a difficulty in timing, but will help children and adolescents answer the questions easily without boring. Another way of providing ease of application, number of items may be decreased according to factor loadings. To prevent loss of items, similar items such as “going to jail” and “going to juvenile system” or “cemeteries/grave yards” and “dead people” may be put together. This will provide convenience in analyses of data, too.

This study was a correlational in nature and inferences about cause effect relationship cannot be made, as it was mentioned in the limitations part. Future studies could design an experimental study in order to investigate the reason of gender, age and socioeconomic status differences in fears of children and adolescents. In this study, differences between the fears of children and adolescents with regard to their age, gender and socioeconomic status were examined, but it was not possible to investigate the reasons. As it was mentioned before results were different for South African and Turkish sample. The reason of difference between children’s and adolescents ranking fear acquisition in South Africa and Turkey could only be speculated for this study, but a certain reason cannot be suggested.

As it was mentioned in the literature part, in this study a self report method, Fear Survey Schedule for Children was used to assess children’s and adolescents’ fears and origins of their fears. Children and adolescents may answer the questions according to socially desirability of the answers. Therefore in order to prevent such possibility, different measurement tools, such as teacher and parent observations, peer forms should be gathered in order to provide more extensive findings.

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APPENDICES

APPENDIX A

THE DEMOGRAPHIC FORM

Okulun Adı Cinsiyet	KIZ						ERKEK					
	Yaş Sınıf	8	9	10	11	12	13	14	15	16	17	18
Annenin en son mezun olduğu okul	Hiçbir okuldan mezun olmadı.				Ortaokul	Lise	Üniversite			Yüksek lisans veya doktora		
Annenin mesleği												
Annenin çalıştığı yer	Kendine ait	Devlet kurumu	Özel şirket	Diğer (belirtiniz)								
Babamın en son mezun olduğu okul	Hiçbir okuldan mezun olmadı.				Ortaokul	Lise	Üniversite			Yüksek lisans veya doktora		
Babamın mesleği												
Babamın çalıştığı yer (kurum)	Kendine ait	Devlet kurumu	Özel şirket	Diğer (belirtiniz)								
Ailenizin ortalama aylık geliri	0-500 TL	501- 1000 TL	1001- 2000 TL	2001- 3000 TL	3001- 4000 TL	4001- 5000 TL	5001- 6000 TL	6001- 7000 TL	7001- 7000 TL	7001 TL ve üzeri (belirtiniz.)		

## APPENDIX B

### SAMPLE ITEMS FROM FEAR SURVEY SHEDULE FOR CHILDREN-TURKISH VERSION

1. Başkalarının benimle alay etmesi
2. Lunaparktaki hızlı tren gibi araçlara binmek
3. Yalnız kalmak
4. Trafik kazası
5. Arabada ya da otobüste yolculuk yapmak
6. Başkaları tarafından küçük düşürülmek ya da eleştirilmek
7. Fare
8. Savaşta mücadele etmek zorunda kalmak
9. Arkadaşlarımı kaybetmek
10. Kapalı alanlarda bulunmak
11. Doktora gitmek
12. Yetersiz / başarısız olmak
13. Okulda düşük notlar almak
14. Ülkemizin düşmanlar tarafından işgal edilmesi
15. Karanlık
16. Yeterli paraya sahip olamamak
17. Nükleer savaş
18. Tehlikeli / kötü ilaç içmek
19. Diş doktoruna gitmek
20. Sınıf arkadaşlarımın önünde konuşmak

## APPENDIX C

### SAMPLE QUESTIONS FROM QUESTIONS DESIGNED FOR ASSESSING THE ORIGINS OF CHILDREN'S AND ADOLESCENTS' FEARS

1. Sizinle aynı korkuyu taşıyan başka birileri tanıyor musunuz?
2. Sizine aynı korkuyu taşıyan birilerini tanımak daha çok korkmanıza sebep oldu mu?
3. Korktuğunuz bu şey ya da durumla ilgili herhangi bir olay yaşadınız mı?
4. Bu şey ya da durumla ilgili korkutucu bir şey yaşamak daha çok korkmanıza sebep oldu mu?
5. Korktuğunuz bu şey ya da olayla ilgili korkutucu bir şey duydunuz mu?
6. Bu şey ya da durumla ilgili korkutucu bir şey duymak daha çok korkmanıza sebep oldu mu?