INTENSITY AND FREQUENCY OF CHILDREN'S FEARS

By

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This study investigated how gender, age (8 through 11), ethnicity (African-American and Caucasian), and family-income level (low and non-low) impacted the intensity and frequency of children's fears. Elementary students (n=556) from a rural school system in North Carolina participated in the study. Dependent variables included adapted versions of the Fear Survey Schedule for Children-Revised (FSSC-R), measuring both the intensity and frequency of children's fears.

Analyses of variance indicated that girls reported significantly more fear intensity, more fear frequency, and more total fear than did boys. Although not significant, African-Americans reported more fear intensity, more fear frequency, and more fears than Caucasians and low income children reported more fear intensity, more fear frequency, and more fears than non-low income children. The results of this study indicate that children between the ages of 8 and 11 fear situations that cause physical harm the most. However, because they reported that they may not fear these situations on a day-to-day basis, the level of fearfulness appears to be somewhat less than was previously reported.

These results suggested that adapted versions of the FSSC-R could be used as tools by school counselors to help recognize specific fears in children and identify children who have a high level of fear intensity and/or fear frequency. Counselors can implement appropriate counseling intervention strategies to help children cope with specific fears as well as provide a safe environment in which children can express their fears.

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CHAPTER I

INTRODUCTION

Children experience fears from infancy through adolescence (Friedman, Campbell, & Okifuji, 1991; King, Hamilton, & Ollendick, 1988), with the fears being developmental in nature and different from those of adults (Friedman et al., 1991; King et al., 1988; Ollendick & Hersen, 1993; Ollendick, King, & Frary, 1989; Ollendick, Matson, & Helsel, 1985; Robinson, Robinson, & Whetsell, 1988). Very young infants fear a loss of support and loud noises while older infants fear strangers and large objects. One-year olds fear separation from parents while two-year olds fear loud noises, imaginary creatures, small animals, being in the dark, and large objects (Morris & Kratochwill, 1983; Ollendick et al., 1985). At approximately three to four years of age, children tend to display an increased fear of the dark, animals, and being separated from parents (Morris & Kratochwill, 1983). At the age of five, children begin to show an increased fear of bodily harm and "bad" people (Maurer, 1965; Morris & Kratochwill, 1983). By the age of six or seven, children typically become fearful of death or bodily injury, school-related events, events depicted by the media, and social situations (Lapouse & Monk, 1959; Morris & Kratochwill, 1983; Ollendick et al.,

1985; Robinson et al., 1988; Scherer & Nakamura, 1968). From approximately six years of age through adolescence, fears generally relate to injury, natural events, and social situations, with a gradual decline in specific fears (Ollendick et al., 1985). Miller, Barrett, Hampe, and Noble (1972) indicated that fear of natural events diminishes with age. Scherer and Nakamura (1968) reported that most studies show that with increasing age, the number of fears in normal children generally declines and the type of fear shifts from primary, concrete fears to anticipatory less-concrete fears. Beginning in the middle-school years and continuing into adolescence, concrete fears become more ambiguous. King, Gullone, and Ollendick (1992) reported that these fears tend to remain stable with a gradual decline through adolescence, with anxiety becoming a more appropriate term than fear (Robinson, Rotter, Fey, & Vogel, 1992).

Children's fears are also adaptive and possess survival value (Ollendick, Yule, & Ollier, 1991). For example, some children's fears, such as a child using extreme caution when crossing the street due to a fear of being hit by a car, have positive and self-preserving qualities (King & Ollendick, 1989; Robinson et al., 1988). Often, fears constitute a protective response for children when situations are not fully understood (Ollendick et al., 1991).

Fear, Anxiety, and Phobia

Morris and Krotochwill (1983) found that it is not uncommon for authors to use the terms fear, anxiety, and phobia interchangeably. While these terms are related, they are distinctive as clarified below.

King et al. (1988) stated that fears are generally depicted as typical reactions to real or imagined situations. McCathie and Spence (1991) indicated that fear is a reaction to perceived threatening stimuli and may be exhibited in terms of physiological, cognitive, and behavioral responses. Physiological responses to fear may include sweating and heart palpitations whereas behavioral responses include a range of actions designed to avoid the feared stimulus. Cognitive responses include personal feelings of anguish and negative thoughts regarding the objectionable nature of the feared object.

Johnson and Melamed (1979) stated that fear is an immediate response to a threatening situation whereas anxiety is viewed as a more extensive emotional experience. Anxiety can be described as a condition of scattered stimulation following a sense of threat or unresolved fear (Epstein, 1972) or an unpleasant state involving apprehension and emotional arousal that can be characterized by two constructs, state (acute) and trait (chronic) anxiety

(King & Ollendick, 1989). State anxiety fluctuates from situation to situation, whereas trait anxiety tends to remain stable (Spielberger, 1973; King & Ollendick, 1989).

Data suggest that a moderate but significant relationship exists between fear and anxiety (Beidel & Turner, 1988; King, Gullone, & Ollendick, 1992; Ollendick, 1983; Ollendick & Yule, 1990; Ollendick, Yule, & Ollier, 1991; Scherer & Nakamura, 1968; Turner, Beidel, & Costello, 1987). Strauss, Lease, Last, and Francis (1988) found that a higher correlation exists between anxiety and fear for children with special needs than for children who were not classified as having special needs.

Anxiety and fears are a part of a normal child's development but, as reported by Miller, Barrett, and Hampe (1974) and King and Ollendick (1989), fear can be problematic for a child if it is out of proportion to the demands of the situation, cannot be reasoned away, is beyond individual control, leads to avoidance, or persists over an extended period of time. In these situations, a child's fear may be labeled as phobic. The Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association, 1994) describes a phobia as an unrelenting and unreasonable fear of a specific article, endeavor, or situation that results in a strong desire to avoid the dreaded article, endeavor, or situation. Phobias

differentiate themselves from anxiety and fears by their intensity, persistence, and degree of maladaptivity (King & Ollendick, 1989).

There is an abundance of research examining the intensity of children's fears, children's anxiety, and children's phobias, many in the context of a clinical population. The objective of this study will be to examine the influence of specific variables on the intensity and frequency of fears in the normal population of 8- through 11-year old children.

Variables that Influence Children's Fears

Variables influencing the self-reported fears of children include their psychological state and their respective level of anxiety (King et al., 1992). Other variables that influence self-reported fears of children are gender (Ollendick et al., 1989), age (King et al., 1988; Lapouse & Monk, 1959; Ollendick, 1983; Ollendick et al., 1989), ethnicity (Lapouse & Monk, 1959), and family income level (King et al., 1988; Lapouse & Monk, 1959).

Several researchers have studied the effect of gender on the fears of children. Using either teacher-report or self-report instruments, Lapouse and Monk (1959), Ollendick (1983), Ollendick et al. (1989), and Scherer and Nakamura (1968) found that girls reported significantly more fears

than boys. However, Miller et al. (1972) found no significant differences between the self-reported fears of boys and girls.

Research findings on the effect of age on fears vary. Lapouse and Monk (1959) found no significant relationship between age and level of fear, but more recent studies suggest that older children have fewer fears than younger children (Gullone & King, 1992; King, Gullone, & Ollendick, 1990; Ollendick et al., 1989; Ollendick & King, 1991).

The literature regarding children's ethnicity and level of fear is limited. In their classic study, Lapouse and Monk (1959) interviewed mothers and their children between the ages of 6 and 12 regarding the child's fears. They found that 63% of the African-American children in the sample had seven or more fears as compared with 39% of the Caucasian children. Reynolds and Paget (1981), however, found no significant differences between African-American and Caucasian children regarding level of fear.

Some research on fear has included data concerning children's family income or socioeconomic level with regard to representation but not as a variable (King et al., 1989). Nalven (1970), however, found that children considered to be at a lower socioeconomic level tended to be more fearful than did their higher socioeconomic counterparts. Nalven (1970) found that level and degree of fears tended to be

inversely related, with lower socioeconomic subjects reporting significantly higher levels of fear, more fears in general, and more specific fears than did children from higher socioeconomic levels.

Traditionally, research on children's fears has focused on fear intensity, with limited attention to how often the child experiences fear. In addition, minimal emphasis has been given to possible differences in frequency and intensity based on independent variables (i.e., gender, age, ethnicity, and family-income level). This study examined not only children's fear intensity and the frequency of those fears, but also the possible relationship among the variables of gender, age, ethnicity, and family-income level and fear intensity and frequency.

Researchers have addressed children's fear intensity (King & Ollendick, 1988) and investigated the influence of age (Ollendick, 1983; Ollendick et al., 1989), gender (Ollendick et al., 1989), and, to a limited degree, ethnicity (Lapouse & Monk, 1959), and family-income level (King et al., 1988). One study has addressed fear frequency (McCathie & Spence, 1991) but no studies have examined the combined effect of fear intensity and fear frequency. In the past, researchers have focused primarily on moderate income Caucasian children. Not only has this study explored fear frequency and combined fear intensity and fear

frequency, but it has provided comparisons between Caucasian and African-American and low and non-low family-income level individuals.

Purpose of the Study

The purpose of this study was to examine the intensity and frequency of fears among 8- to 11-year old children and the relationship of those fears and an individual's gender, age, ethnicity, and family-income level. Traditionally, intensity of fears has been viewed as the mean number of stimulus items that received a maximum rating (McCathie & Spence, 1991). In contrast, Ollendick et al. (1985) described frequency of fear as prevalence. Similarly, Silverman and Nelles (1988) indicated that "prevalence" may be viewed as the frequency of highly feared reported stimuli whereas "frequency" would indicate the number of times a specific item is endorsed. In studies involving self-reported fears, fear intensity has been determined by the number and degree of fears indicated by an individual (Ollendick, 1983; Ollendick et al., 1989), with little or no attention to the frequency with which children experience those fears. One study (McCathie & Spence, 1991) addressed the issue of fear frequency although their findings were inconclusive. McCathie and Spence (1991) addressed the

issue of fear frequency but by combining the dimensions of intensity, frequency, and avoidance into one instrument, may not have been able to capture the frequency response.

In this study, intensity of children's fears will be determined by the prevalence of fear and frequency of children's fears will be determined by self-reported incidence of fear. Thus, examining fear intensity and frequency as defined will help establish an improved knowledge base of children's fears. In addition, investigating specific fears relative to specific demographic variables will help identify distinct fears within particular groups.

Specifically, this study will focus on four questions:

(1) What are the fears of boys and girls and what is the effect of gender on the intensity and frequency of self-reported fears of 8- to 11-year old children?

(2) What are the fears of 8- to 11-year olds and what is the effect of age on the intensity and frequency of self-reported fears of 8- to 11-year old children?

(3) What are the fears of African-American and Caucasian children and what is the effect of ethnicity on the intensity and frequency of self-reported fears of 8- to 11-year old children?

(4) What are the fears of low and non-low family-income level children and what is the effect of family-income level on the intensity and frequency of self-reported fears of 8- to 11-year old children?

Definition of Terms

For the purposes of this study, the following definitions were used:

African-American: Children who are identified as African-American.

Caucasian: Children who are identified as Caucasian.

Other: Children not classified as African-American or Caucasian.

Fear Intensity: The prevalence of fear; how much fear is reported as being experienced.

Fear Frequency: The incidence of fear; how often fear is reported as being experienced.

Total Fear: Combined fear intensity and fear frequency scores.

Low Family-income Level: Those children whose parents have requested and meet the federal guidelines for free or reduced lunch.

Non-low Family-income Level: Those children whose parents have not requested and/or do not meet the federal guidelines for free or reduced lunch.

Need for the Study

Fears can have a profound effect on children (Ollendick & King, 1990). Miller, Barrett, and Hampe (1974) found a 5% incidence of intense fears in their sample of 7- to 12-year olds. Even when fears are not extreme, however, they still have an effect on children. Cotton and Range (1990) found that a fear of death was related to the development of overall death concepts in their sample of 6-to 12-year olds. Lapouse and Monk (1959) found that parents with children between the ages of 6 to 12 years of age reported that 43% of their children had seven or more fears, with daughters experiencing more fears than sons. Ollendick (1983) found that children between the ages of 8 and 11 had an average of 11 fears, whereas Ollendick et al. (1985) found an average of 13 fears among children. Fears over test performance (Ollendick & Meyer, 1984) and attending school (Nichols & Berg, 1970) has been linked to low self-esteem. Johnson and Melamed (1979) reported that an estimated 10% to 30% of school-aged children fear tests. Turner et al. (1987) found that children of adults who suffered from anxiety disorders reported the greatest number of fears. Fears, then, can have a profound influence on a child's academic performance and psychological well-being.

Counselors and other adults who work with children need to understand children's fears in order to maximize the child's educational and personal experience (Robinson et al., 1988), since fears affect learning at school (Phillips, 1978). Robinson et al. (1988) stated that knowing the common fears of children can help school counselors and educators prepare children to cope with their fears. Counselors working with children can develop counseling programs that may help those children contend with fears and assist parents in helping their children to cope with specific fears (Zabin & Melamed, 1980). Knowledge of developmentally appropriate fears and the effect of gender, age, ethnicity, and family-income level on children's fears is necessary to assist counselors in developing counseling programs that can help children cope with fears.

Dissertation Format

Each of the remaining four chapters have a distinct purpose. Chapter II consists of a review of the literature concerning children's fears and assessment methods. The methodology used to study the effects of gender, age, ethnicity, and family income level on intensity and frequency of fear scores from the adapted versions of the Fear Survey Schedule for Children-Revised (Ollendick, 1983) is described in Chapter III. Chapter IV contains the

results of the data analysis. In Chapter V, the summary, limitations of the study, conclusions, recommendations, and implications for practice are discussed.

CHAPTER II

REVIEW OF RELATED LITERATURE

The literature review chapter focuses on four areas that concern the study of children's fears. Provided in section one is a historical perspective of the study of children's fears. Theoretical views of fear acquisition are presented in the second section. Variables that may affect the intensity and frequency of self-reported fears in children who are 8 to 11 years old are examined in the third section of the chapter. Methods of assessing self-reported fears in children are presented in section four.

Historical Perspective of Children's Fears

Researchers have long been interested in studying children's fears. The study of children's fears began almost 100 years ago with Hall (1897) and has included notable writers such as Freud (1909), Watson and Raynor (1920), and Jersild and Holmes (1933). In 1897, Hall gathered data on fears from 1500 people who were primarily under the age of 23. He noted that thunder and lightning, reptiles, darkness, strange people, fire, death, disease, insects, wild animals, ghosts, and water invoked fear in children. Jersild and Holmes (1933) interviewed 400 New York city school children and found the ten most frequently reported fears to be particular animals, frightening movies,

nightmares, spiritual beings, terrifying gestures, dark places, scary stories, night specters, eerie noises, and accidents. During the 1950s, Lapouse and Monk (1959) found that children feared snakes, strangers, and poor grades.

Over the past 30 years, children's self-reported fears have not changed dramatically. In 1989, Ollendick et al. found that the 10 most common fears in a group of approximately 500 children were being hit by a car or truck, not being able to breathe, being invaded, getting burned, falling from a high place, getting robbed, an earthquake, death or dead people, getting poor grades, and snakes.

Theoretical Approaches to Fears

Fears have been examined from a variety of theoretical approaches. The majority of published studies were generated from the behavioral perspective (Morris & Kratochwill, 1983). In addition to behavioral and cognitive-behavioral approaches, some of the more common theoretical frameworks regarding fear include psychoanalytic, Adlerian, Rogerian, and biological/organic (Morris & Kratochwill, 1983).

Behavior Theory

Fear, viewed from a behavioral theoretical approach, originates through learning. Children learn to avoid a specific object, incident, or situation through conditioning

that has occurred in the past; a child's environment initiates and maintains an individual's level of fear (Wolpe & Lang, 1964).

Concerning treating specific fears, behaviorists maintain that different events are responsible for the development of each fear. Accordingly, intervention could then effect one fear without effecting others and would focus on the present with very specific goals of counseling (Morris & Kratochwill, 1983). Behaviorists view a child's fear(s) as an example of how the child behaves within a particular setting or when certain stimuli are present, so fears are viewed as setting specific. Behaviorists would not assume that insight regarding the fear would affect a positive behavior change (Wolpe, 1958).

Cognitive-behavioral Theory. Kendall (1985) reported that the cognitive-behavioral approach focuses on the learning process with regard to fears and the effect of behavioral contingencies experienced in a child's surroundings. Kendall, Howard, and Epps (1988) found the significance of information processing and mediation in the development and treatment of childhood fears to be an important aspect of the cognitive-behavioral approach. King and Ollendick (1989) suggested that the cognitive-behavioral approach is one of the most instructional approaches and reduces the gap between educational and psychological

interventions. Cognitive-behavioral procedures have been used to prepare children for possibly frightening experiences such as surgery and hospitalization (Melamed & Siegel, 1975) and to overcome social-evaluative fears (King & Ollendick, 1989).

Psychoanalytic Theory

Psychoanalytic theorists believe that all fears are caused by conflict and are interrelated. By resolving the conflict through insight, all fears can be resolved. Because the fear is caused by internal factors (Patterson, 1986) theorists believe that fears are not situation specific. Psychoanalytic theorists' emphases in treatment are on the unconscious, past incidents that may have contributed to the child's present behavior, and a reorganization of the child's personality (Freud, 1909).

Morris and Kratochwill (1983) noted that according to psychoanalytic theorists, children become fixated in a particular stage of development and their fears are projected onto a specific object or situation as a substitute for their fears of the parent of the opposite sex. Psychoanalytic theorists view fears as being interrelated and caused by psychological conflict, with the fears themselves providing an attempt to resolve the conflict. The basic conflict is the cause of the fear behaviors (Schwartz & Johnson, 1985).

Adlerian Theory

Theorists who ascribe to an Adlerian approach maintain that children's fears are developed out of a child's life style when there are feelings of low social interest, resulting in discouragement. Adlerian theorists believe that children's fears only will become a problem if the parents pay attention to the fear(s) (Rattner, 1983).

Adlerian theorists view fears as being interrelated and caused by psychological conflict. The basic conflict, which is related to distortion and the family constellation, is the cause of the fear behaviors. Adlerian theorists report that because all fears are interrelated, resolution of the conflict would resolve all related fears. Insight is essential in order for change to occur (Morris & Kratochwill, 1983).

The emphasis of treatment is on the unconscious and past events that may have contributed to the current behavior, particularly those involving the parents, siblings, or family as a whole. The major goal of counseling is to help the child achieve self-realization regarding their fears (Morris & Kratochwill, 1983).

Rogerian Theory

Theorists who ascribe to a Rogerian approach maintain that children's fears are the result of being in a state of incongruence between their own perceptions of themselves and

the actual experience that confronted them (Morris & Kratochwill, 1983). Rogerian theorists believe that as incongruence increases, the child feels threatened; if these feelings do not become a part of the child, then avoidance of the threat may occur (Rogers, 1951).

Rogers (1951) viewed fears as being interrelated and caused by psychological conflict, with the fears themselves providing an attempt to resolve the conflict. The basic conflict is the cause of the fear behaviors. It is maintained that insight is necessary in order for change to occur. The emphasis of treatment is on the present; the child is suffering because the present life situation may be threatening the individual's self-concept. The goal of counseling is to help the individual reach his or her potential (Rogers, 1951).

Biological/Organic Theory

Biological and organic theorists maintain that children's fears are related to biological conditions of the child. These theorists believe that fears occur independently of an individual's learning and that individuals are predisposed to those fears through their individual history (Marks, 1969). It is assumed that each fear, related to the same biological condition, will occur simultaneously. By treating the condition, the therapist

would be potentially reducing the fear (Morris & Kratochwill, 1983). Insight is not a necessary condition for change to occur.

Biological and organic theorists view fears as resulting from a biological condition and do not view them as situation specific, believing that the fear goes beyond the setting. The emphasis for treatment, focused on the present, would be very specific. Biological and organic theorists do not view the unconscious as a factor in influencing children's fears because they believe that biological factors influence fears.

This study approaches the investigation of children's fears from a cognitive-behaviorist perspective. Since this approach encourages children to be actively involved in identification of their fears, counselors are able to talk about and teach children ways to help them deal with their fears. Children can learn ways to deal with their fears through discussion, modeling, and specific techniques designed to put the child in control of his fears.

Variables Related to Expressed Fears

Researchers have concentrated on the identification of children's fears and their relationship to variables such as gender (Ollendick et al., 1989), age (Ollendick, 1983; Ollendick et al., 1989), ethnicity (Lapouse & Monk, 1959), and family income level (King et al., 1988; Lapouse & Monk,

1959). Unfortunately, researchers are inclined to view these variables in isolation as opposed to integration. According to King and Ollendick (1988), researchers should give greater attention to groups of children by gender, age, ethnicity, and socioeconomic level in order to represent the general population of children.

Gender

Studies have shown that girls tend to obtain higher intensity and prevalence fear scores than do boys (Lapouse & Monk, 1959; Ollendick, 1983; Ollendick et al., 1989; Ollendick et al., 1991; Scherer & Nakamura, 1968; Silverman & Nelles, 1988), thus indicating that there is a tendency for girls to report a greater number of fears when compared with boys (Graziano, DeGiovanni, & Garcia, 1979). A possible explanation for the difference in reported scores may be due to sociological factors. It has been reported that boys are expected to have fewer fears as reflected by self-report instruments and that boys consistently proclaim fewer fears than girls (Ollendick, 1983; Ollendick et al., 1989; Silverman & Nelles, 1987; Spiegler & Liebert, 1970). It has also been reported that girls may be more likely than boys to admit their fears (Graziano et al., 1979). Thus, it may be erroneous to assume that boys' reported fears are as accurate as are girls' reported fears.

Ollendick (1983) found distinct differences between the reported fears of boys and girls, with the mean for boys being approximately one standard deviation below the reported mean for girls. Silverman and Nelles (1988) combined self-report with a rating scale by asking children to rate their own fears and the fears of their peers in order to observe gender differences. They asked 62 9-year olds to rate their fears using the Fear Survey Schedule for Children-Revised (FSSC-R). The participants also were asked to rate other boys' fears and other girls' fears. The researchers found that boys and girls both rated boys as less fearful than girls, thus supporting the belief that girls report more fears than do boys.

Boys and girls differ in the number and degree of reported fears, but the content of reported fears appears to be somewhat similar. McCathie and Spence (1991), Ollendick (1983), and Ollendick et al. (1989) demonstrated similarities between what boys and girls find most fear-producing, yet some of their findings differ. McCathie and Spence (1991) found that both boys and girls fear not being able to breathe, nuclear war, being hit by a car or truck, and falling from high places. However, Ollendick et al. (1989) found that boys were afraid of illness and getting poor grades, whereas girls were more concerned with being lost in a strange place and snakes. Pratt (1945) found that

girls were more likely to fear disease, the dark, and insects, whereas boys were more likely to fear things associated with school and wild animals.

Although specific fears may appear analogous, boys and girls may have different reasons for having those fears. When the effects of ability were partialled out, Zatz and Chassin (1983) found there was a gender difference in the relationship between fear of tests and actual performance. For boys, the negative relationship between test fear and performance remained, suggesting that the relationship was not a result of ability level. For girls, however, the relationship between fear of tests and performance was nonexistent when ability was partialled out. This result might suggest that girls who fear tests have a low ability level and have learned to fear tests because of their poor past performance (Zatz & Chassin, 1983).

Ollendick et al. (1985) examined through self-report the frequency, intensity, and factor structure of fear in children between the ages of 7 and 18. They found that girls reported more fears and an overall higher intensity of fears than did boys. Girls reported an average of 16 fears while boys reported approximately half as many. Similarly, King et al. (1990) found that girls ($\underline{M}$ = 18.2) reported a significantly greater number of fears than did boys

($\underline{M}$ = 11.4). King et al. (1990) also found that children's self-reports of fear were influenced by health status, age, and gender.

The majority of reported studies indicate that girls report more fears than do boys and that girls' self-reported level of fear is higher than is boys' self-reported level of fear (Lapouse & Monk, 1959; Ollendick, 1983; Ollendick et al., 1989; Ollendick et al., 1991; Scherer & Nakamura, 1968; Silverman & Nelles, 1988). Since these differences may be due to sociological factors, it is important to recognize that a moderately elevated boy's fear score may be indicative of a much higher level of fear when compared with an equally moderate elevated girl's fear score.

Age

Friedman et al. (1991), Pratt (1945), and Maurer (1965) found very little difference between mean levels of fear in children from the age of 8 until adolescence. In their study of twins, Stevenson, Batten, and Cherner (1992) found an age-related decline in fears. King et al. (1989) conducted a 3 (age: 8-10, 11-13, 14-16) X 2 (gender) X 2 (location: urban, rural) ANOVA on the Total Fear Score of 3118 children. They found that age and gender impacted Total Fear Scores but location did not. Results yielded means of 140, 136, and 131 for ages 8-10, 11-13, and 14-16, respectively ($\underline{p} < .001$).

Davidson, White, Smith, and Poppen (1989) surveyed 650 boys and girls in grades four, five, and six and found that fourth and fifth graders were more fearful than were sixth graders. King, Gullone, and Ollendick (1990) compared 146 matched health-impaired (n = 73) and normal children (n = 73) ranging in age from 7 to 18 and found that older children reported significantly fewer fears than younger children. Spence and McCathie (1993) studied children's fears from a longitudinal perspective, assessing 94 children in third and fourth grade and again in fifth and sixth grade. They found that children's reported fears declined with age with the exception of giving an oral report. They also found that children who tended to report a higher number of fears initially tended to report a higher number of fears two years later.

Ollendick et al. (1985) did not find clear patterns emerge regarding age. They found that younger children expressed more fears than older children and found that 8 to 10 of the most common fears were shared by the range of ages. With regard to content, Ollendick et al. (1989) found that younger children were more concerned with getting lost in a strange place and being sent to the principal's office, whereas older children and adolescents were more concerned with having their parents argue and failing a test. In her interviews with 130 children between the ages of 5 and 14,

Maurer (1965) found that people were mentioned quite often as fear objects, as were snakes and other animals, but that as the fear of animals declined, the fear of people increased.

King et al. (1989) found that the most common self-reported fears concerned danger and death. The item "Nuclear war" was the fear chosen most often. Overall, the most common fears reported by 8- to 10-year olds declined in the 11- to 13-year old group and declined even further in the 14- to 16-year old group. Similar findings were obtained by Gullone and King (1993) while studying 918 Australian children between 7 and 18 years old. They found the most common fears of the 7- to 10-year olds to be strangers, being kidnapped, getting lost, having to talk in front of the class, being invaded, being sent to the principal, and strange-looking people, most of which focused on death and danger. The older children were more concerned with social-evaluative criticism.

Research findings on the effect of age on fears vary. Lapouse and Monk (1959) found no significant relationship between age and level of fear, but more recent studies suggest that older children have fewer fears than younger children (Gullone & King, 1992; King et al., 1990; Ollendick et al., 1989; Ollendick & King, 1991). Common fears of

younger children tend to revolve around physical harms while older children seem to be more concerned about how they appear to others.

Ethnicity

Fear research including data regarding children's ethnicity and level of fear is quite scarce. Lapouse and Monk (1959) interviewed mothers and children between the ages of 6 and 12 regarding the children's fears and found that 63% of the African-American children in the sample had seven or more fears as compared with 39% of the Caucasian children. Reynolds and Paget (1981), however, found no significant differences between African-American and Caucasian children with regard to fear. While studying 213 boys ranging in age from 5 to 17 years, Perrin and Last (1992) also found there were no significant effects for race when examining fear intensity.

The literature regarding children's ethnicity and level of fear is limited and contradictory. A classic study conducted in 1959 (Lapouse & Monk) found that African-American children in the sample had more fears when compared with Caucasian children. However, a smaller study conducted in 1981 (Reynolds & Paget) and one conducted in 1992 (Perrin & Last) found no significant differences between African-

American and Caucasian children regarding level of fear. These contradictions indicate a need for further exploration of ethnic differences with regard to fear.

Family-income Level

The results of studies using family-income level as an independent variable when studying children's fears are mixed (Graziano et al., 1979). Jersild and Holmes (1933) and Nalven (1970) found that children from lower family-income levels have more fears and different fears than those from higher family-income levels. Their lower income level children tended to fear more specific events or objects, such as violence, drug dealers, or rats, whereas higher family-income children tended to fear more broad events such as heights, car wrecks, or dangerous animals (Jersild & Holmes, 1933; Nalven, 1970). However, Perrin and Last (1992) found there were no significant effects for socioeconomic status when examining fear intensity.

Some research on fear has included data concerning children's family income or socioeconomic level with regard to representation but not as a research variable (King et al., 1989). Nalven (1970), however, found that children considered to be at a lower socioeconomic level tended to be more fearful than did their higher socioeconomic counterparts. Nalven (1970) also found that lower

socioeconomic subjects reported significantly higher levels of fear, more fears in general, and more specific fears than children from higher socioeconomic levels.

As was apparent with previous fear studies involving ethnic differences, results involving socioeconomic level were contradictory. Studies done more than 20 years ago indicated significant differences between higher and lower socioeconomic level, however, more current studies do not indicate significant differences. Comparisons between these two groups are necessary in order to identify fears unique to specific groups.

Methods of Assessment

There are two general methods of assessing fear: physiological and psychological. Physiological evaluations focus primarily on the magnitude of the fear reaction and employ the measurement of respiration rate, pulse rate, blood pressure, galvanic skin response, and degree of palm sweating (Marks, 1969; O'Leary & Johnson, 1986). These methods are costly and do not lend themselves to use in the school environment. Psychological evaluations of fear distinguish particular fear stimuli and the degree of the fear reaction relative to that stimulus (Ryall & Dietiker, 1979). These evaluations typically are in the format of

self-report instruments such as surveys, scales, and questionnaires, methods which better lend themselves to the school environment.

Self-report Instruments

The expression of fear is affected by what has occurred and what is currently occurring in a person's environment, such as their disposition and developmental level (Gullone & King, 1992) and the combination of effects is difficult to evaluate through observation. Self-report instruments can be used to measure fear and identify various influential factors, especially in the area of identification of individual fear sensitivities (Ollendick, 1983; Ollendick et al., 1985).

Self-report can be enhanced by observational input from teachers and parents, providing the evaluator with more information regarding the students, but should not be the sole source of information. Obtaining data from the teacher can be accomplished through the structured psychiatric interview (Herjanic & Reich, 1982; Edelbrock, Costello, Dulcan, Conover, & Kalas, 1986) which involves self-report from the child with pertinent input from the teacher.

Argulewicz and Miller (1985) compared self-reported and teachers' rankings of fear among first grade children. Results suggested that the level of fear reported by students was unrelated to teachers' ranking. Herjanic and

Reich (1982) noted that one limitation in reliance on parent and/or teacher report may be the psychological state of that parent or teacher. They also stated that, even when dealing with younger children, researchers should not assume more accuracy when questioning teachers or parents about their children's beliefs. Herjanic and Reich (1982) stated that children may be the best authority for research requiring the answers to personal questions relating to themselves. Self-report instruments are the most common method used to assess fear (O'Leary & Johnson, 1986), are cost effective, easy to administer, and usually require a short amount of time to complete (Ollendick & Hersen, 1993).

Researchers in the past have utilized teacher report, parent report, and student self-report to identify children's fears and their relationship to variables such as gender, age, ethnicity, and family-income level, but are inclined to view these variables in isolation as opposed to integration. Since fears can affect learning at school (Phillips, 1978), counselors and other adults who work with children need to identify children's fears in order to maximize the child's educational and personal experience (Robinson et al., 1988).

According to King and Ollendick (1988), researchers should give greater attention to groups of children by gender, age, ethnicity, and socioeconomic level in order to

represent the general population of children. By knowing the common fears of children, discovering similarities and differences between various demographic groups, and utilizing self-report instruments, school counselors and educators can better prepare children to cope with their fears. Counselors can develop counseling programs that may help children contend with fears and assist and educate parents in helping their children to cope with specific fears (Zabin & Melamed, 1980).

CHAPTER III

METHODOLOGY

Chapter III describes the methods that were used to study the effects of gender, age, ethnicity, and family-income level on the intensity and frequency of fear scores of 8- to 11-year old children. The chapter includes the research hypotheses, the method of subject selection, instrumentation, and the statistical analyses that were used to examine the data.

A substantial amount of research examining the intensity of children's fears has primarily relied on parent and teacher input along with self-report. Almost exclusively the research has ignored the possible impact of the frequency with which children experience specific fears. The impact of gender, age, ethnicity, and family-income level on fear has not been fully explored.

The purpose of this study was to examine the intensity and frequency of fears among normal 8- to 11-year old children and the relationship between fear and an individual's gender, age, ethnicity, and family-income level. In this study, intensity of children's fears were determined by identifying how much specific fear is

experienced and how often the fear is experienced. Thus, examining fear intensity and frequency as defined can help establish an improved knowledge base of children's fears.

Research Hypotheses

The following eight hypotheses were developed to address the research questions:

(1) Girls will report significantly higher intensity scores on the adapted Fear Survey Schedule for Children-Revised (FSSC-R) than boys.

(2) A significant difference will exist in the intensity scores on the adapted FSSC-R for 8- to 9-year olds compared with 10- to 11-year olds.

(3) A significant difference will exist between African-American and Caucasian children's intensity scores on the adapted FSSC-R.

(4) A significant difference will exist between the intensity scores on the adapted FSSC-R of children determined to have a low family-income level and children not classified as having a low family-income level.

(5) Girls will report significantly higher frequency scores on the adapted Fear Survey Schedule for Children-Revised (FSSC-R) than boys.

(6) A significant difference will exist in the frequency scores on the adapted FSSC-R for 8- to 9-year olds compared with 10- to 11-year olds.

(7) A significant difference will exist between African-American and Caucasian children on the frequency scores of the adapted FSSC-R.

(8) A significant difference will exist between the frequency scores on the adapted FSSC-R of children determined to have a low family-income level and children not classified as having a low family-income level.

Participants

The participants included in this study were 556 third-, fourth-, and fifth-grade students between the ages of 8 and 11 enrolled in one of five voluntary schools in a North Carolina Piedmont-area school district. In order for schools to be included in the study, principals had to be willing to allow teachers and students from their schools participate.

Students were included in the study as participants after their parents signed a permission form (Appendix A); all students with parent authorization were participants in the study. The total group of participants included Asians and Hispanics, but because of their small number, subgroup results are reported only for African-American and Caucasian children. Low family-income designation was determined through qualification for free or reduced lunch through the federal lunch program. All other participants were

classified as non-low family-income; this group was classified through nonparticipation in the federal lunch program.

Approximately 35% of the students from all five schools participated in the study. The number and percent of participants are described in Table 1, which are listed by grade, ethnicity, and family-income level. The county population was adequately represented by this group except for children who were classified as "other" and 11-year olds who were underrepresented.

Table 1

Number and Percentage of Participants: Gender, Ethnicity, and Family-Income Level by Age.

	Age					
Participants	8	9	10	11	Total	%
	N=174	N=178	N=177	N=27	N=556	
Gender						
Boys	85	88	88	14	275	49
Girls	89	90	89	13	281	51
Ethnicity						
African-American	32	26	32	8	98	18
Caucasian	140	149	143	18	450	81
Other	2	3	2	1	8	1
Income level						
Low	43	36	51	11	141	25
Non-low	131	142	126	16	415	75

Instrumentation

Fear intensity and fear frequency were determined using student self-reports. Two adapted versions of the Fear Survey Schedule for Children-Revised (FSSC-R) were employed.

The Fear Survey Schedule for Children-Revised

The Fear Survey Schedule for Children-Revised (FSSC-R) (Appendix B) (Ollendick, 1983) is an 80 item self-report inventory designed to appraise fears in children. The FSSC-R was adapted from Scherer and Nakamura's (1968) original Fear Survey Schedule for Children (FSS-FC). The FSS-FC was based on Wolpe and Lang's (1964) and Geer's (1965) adult fear survey schedules and was developed using items from adult fear survey schedules and from consulting with professionals familiar with children's fears (Scherer & Nakamura, 1968). The FSSC-R depicts a broad range of particular objects and circumstances that children may find fear-producing (Miller, Barrett, & Hampe, 1974) and is considered trait-oriented (Williams & Jones, 1989). This instrument measures intensity and prevalence of fears. Children in various parts of the United States, Australia, and Great Britain have been involved in studies utilizing the FSSC-R (King et al., 1992; Ollendick et al., 1985).

Reliability. The FSSC-R has been shown to have high internal consistency, moderate test-retest reliability, and moderate stability of scores over time (Ollendick, 1983; 1988). Using two samples of children, Ollendick (1983) obtained high internal consistency, with Coefficient alphas of .93 for boys and .95 for girls. Test-retest reliability over one week was high, with .81 for boys to .89 for girls.

Over a three-month interval, test-retest reliability showed only moderate results, with .58 for girls to .62 for boys (Ollendick, 1983).

Validity. Ollendick (1983) reported that the validity of the FSSC-R has been supported through comparisons with the Trait Scale of the State-Trait Anxiety Inventory for Children, the Piers-Harris Children's Self-Concept Scale, and the Nowicki-Strickland Locus of Control Scale. The FSSC-R has been shown to positively relate to trait anxiety (r = .46) and to negatively relate to both self-concept (r = -.69) and internal locus of control (r = -.60) (Ollendick, 1983).

Ollendick and Meyer (1984) found significant differences in fear intensity scores between school phobic girls (M = 175; SD = 41) and school phobic boys (M = 145; SD = 29) and their matched controls, nonschool phobic girls (M = 145; SD = 39) and nonschool phobic boys (M = 125; SD = 24). This finding supports the validity of the FSSC-R in differentiating between clinical and nonclinical groups. Other researchers (Last, Francis, & Strauss, 1989; King et al., 1990; King, Ollendick, Gullone, Cummins, & Josephs, 1990) also found the FSSC-R to discriminate between clinical and normal populations.

Factor-analytic studies (Ollendick, 1983; Ollendick et al., 1989) consistently yielded five factors which accounted for 77% of the variance: fear of failure and criticism, fear of the unknown, fear of injury and small animals, fear of danger and death, and medical fears. Fear of failure and criticism included 23 items related to social-evaluative situations, such as failing a test, being called on by the teacher, being sent to the principal, or being criticized by others. Fear of the unknown included 20 items related to unfamiliar circumstances or unpredictable consequences such as thunderstorms, being in a big crowd, or loud sirens. Fear of injury and small animals included 18 items related to harmful objects (e.g., guns or involvement in a fight) or small animals such as spiders, rats, or mice. Fear of danger and death included 12 items related to danger or death such as nuclear war, being hit by a car, or not being able to breathe. Medical fears included 7 items related to medical issues (e.g., having to go to the hospital or getting a shot from the nurse/doctor) or going to the dentist (Ollendick, 1988).

Instrument Modification. Two modified versions of the FSSC-R were created for the purpose of this study. The adapted intensity version (Appendix C), which is very similar to the original FSSC-R, measures the intensity of children's specific fears. The order and substance of the

questions was not altered, although the wording of 27 items was changed to allow consistency with the rest of the items (Friedman, 1992). Changes were minor (i.e., "Elevators" was changed to "Riding in an elevator") except for one significant change, "Russia" was changed to "Nuclear war" (Gullone & King, 1992; Gullone & King, 1993; King, Ollier, Iacuone, Schuster, Bays, Gullone, & Ollendick, 1989; Spence & McCathie, 1993), which was made to more closely resemble current conditions. Researchers (Gullone & King, 1992; Spence & McCathie, 1993) found that adding an example item, "Sharks," helped to eliminate any confusion and allow questions before the actual administration of the instrument. Children responded to each item according to the word or phrase that best described how much of a specific fear they believed they had. Respondents assigned a score of [1 = "None," 2 = "Some," and 3 = "A lot,"] for each item. Scores were then summed across items to produce a Fear Intensity Score. In order to give more meaning to each child's choices, the same items were randomly reordered (Kerlinger, 1986) for an adapted <u>frequency</u> version (Appendix D) of the FSSC-R. With this adaptation the frequency rather than the intensity of each fear is established. Children responded to each item according to the word or phrase that best described how <u>often</u> they thought about a specific fear. Respondents assigned a score of [1 = "Hardly ever," 2 =

"Sometimes," and 3 = "A lot of the time,"] to each item. Scores were then summed across items to produce a Fear Frequency Score. The items for both modified instruments were transferred to Opscan sheets for ease of scoring.

In order to determine the similarity between the original FSSC-R and the adapted intensity version, 57 participants were administered the FSSC-R and the adapted intensity version during a pilot study. A correlation of .95 was obtained.

Survey Instructions. The intensity survey included instructions easily understood by children between the ages of 8 and 12, with third grade readability (Ollendick, 1983). Respondents were assured that there were no right or wrong answers. They were asked to respond to each of the 80 items by marking the amount of fear (i.e., none, some, or a lot) they have related to a specific object or situation. The frequency survey instructions were identical to those of the intensity survey except respondents were directed to indicate how often they experienced a specific fear (i.e., hardly ever, sometimes, a lot of the time).

Scoring the FSSC-R. King et al. (1989) described the Fear Score as a global index of a respondent's level of fear which could be determined by summing the responses to each of the items. Higher scores signify greater levels of fears (Friedman, 1992). On the Intensity instrument, scores

reveal the prevalence of specific fears, therefore the Fear Intensity Score indicates the intensity of fears. An intensity score can range from 80 (no intensity) to 240 (extremely high intensity) (Silverman & Nelles, 1988). On the Frequency instrument, scores reveal the incidence of specific fears, therefore the Fear Frequency Score indicates the frequency of fears. A frequency score can range from 80 (no frequency) to 240 (extremely high frequency).

By combining fear intensity and fear frequency through multiplicative combination (L. Bond, personal communication, June 13, 1994), each subject's total fear frequency and intensity score is indicative of both the degree and frequency of their fears. Total Fear Scores were obtained by multiplying an individual's intensity items by their frequency items which are then summed. The Total Fear Score can range from 80 (little or no fear at any time) to 720 (a high degree of fear all of the time).

Procedures

After the initial meeting with participating teachers was conducted, parent permission forms were sent home with the children and collected by individual teachers. Once permission had been received, teachers completed the Student Data Sheet (Appendix E) for those who would be participating. Student data was transferred to the Opscan

instrument sheet. To ensure anonymity, student identification consisted of numbers created by a student number, teacher number, and school number.

Both versions of the modified FSSC-R were administered in a counterbalanced design that consisted of randomly alternating the order in which each instrument was given on a classroom-by-classroom basis. All participants were assessed in their classroom according to standard administration procedures for the FSSC-R (Ollendick, 1983), utilizing a procedural manual (Appendix F). Before administration of either instrument began, a practice item "Sharks" was used to demonstrate the method of instrument marking and to provide clarification. Children were instructed to read each fear item carefully along with the examiner, who read each item aloud. When the intensity version was administered, participants were asked to fill in the circle next to the phrase that best described how much fear they had with regard to that item. When the frequency version was administered, participants were asked to fill in the circle next to the phrase that best described how often they experienced fear with regard to that item.

In order for all students to adequately complete both instruments, the average administration of these instruments was one hour per class. Most third grade students had no previous experience with Opscan instruments, therefore,

administration time ranged from approximately 45 minutes for fifth grade classes to 1 hour and 15 minutes for third grade classes.

CHAPTER IV

RESULTS

Chapter IV includes results of the statistical analyses used to test the research hypotheses outlined in Chapter III. Chapter IV consists of two main sections. In section one, each hypothesis will be addressed through analyses of variance, followed by an examination of the factor structure. Section two consists of an examination of the variables studied.

The data analyses provided the use of inferential and descriptive statistics concerning the dependent and independent variables. Analyses of variance were conducted to identify any significant main effects for Intensity, Frequency, and Total Fear Scores. Two- and three-way interactions among the four independent variables (i.e., gender, age, ethnicity, and family-income level) on fear intensity, fear frequency, and total fear were also examined. The factor structure of the frequency version of the FSSC-R was unknown. Consequently, a factor analysis was conducted in order to determine the factor structure of the frequency version of the FSSC-R. Due to the modifications made in the survey items, a factor analysis also was conducted to determine any resulting changes in the factor

structure of the intensity version of the FSSC-R. Descriptive statistics were calculated for participants' gender, age, ethnicity, and family-income level.

Discussion of the Hypotheses

To address the eight hypotheses, analyses of variance were conducted. The 2 (gender) x 2 (age: 8/9-year olds, 10/11-year olds) x 2 (ethnicity: African-American, Caucasian) x 2 (family-income level: low, non-low) analyses of variance were conducted to identify significant main effects for Intensity, Frequency, and Total Fear Scores. In order to control the overall Type I error rate, a Bonferroni correction was utilized for the four statistical tests with each dependent variable (Neter, Wasserman, & Kutner, 1990). Thus, each test for main effect was conducted at a (.05/4)=.0125 alpha level. Interactions among the four independent variables were also investigated. For exploratory purposes, a factor analysis was conducted on the fear intensity and fear frequency instruments to determine factor structure.

Factor Analysis

A factor analysis was conducted on both the Adapted Intensity Version of the FSSC-R and the Adapted Frequency Version of the FSSC-R. No clear factor solution emerged. Several problems emerged while attempting to conduct the analyses. First, it was difficult to ascertain the number

of factors to be retained since the scree plot indicated four, five, or six factors and the number of factors with eigenvalues greater than or equal to one was approximately 16 (Tabachnick & Fidell, 1989). Ollendick's (1988) factor analytic solution of the Intensity version of the FSSC-R explained 77% of the variance with a five factor solution while the variance explained by the five factor solution in this study was 42%. In this study, over 30 factors would need to be retained to explain a similar amount of variance.

Second, many of the items had low loadings (< .4) (Comrey, 1973). Third, simple structure (Tabachnick & Fidell, 1989) was not obtained with the four and five factor solutions as more than half of the items double-loaded (i.e., had similar factor loadings on two or more factors). Fourth, items loading within a factor did not always fit together logically with any of the factor solutions (i.e., "Nuclear war" and "Being sent to the principal's office").

Analyses of Variance

The results of the analyzed data is presented by hypotheses. Analyses of variance were used to determine significant main effects of gender, age, ethnicity, and family-income on Fear Intensity. The results presented in Table 2 indicate an overall significant main effect for one or more of the independent variables [F (4,543) = 24.06, p = .0001].

Table 2

Results of Analyses of Variance: Fear Intensity by Gender, Age, Ethnicity, and Family-income Level

Source	Degrees of freedom	Sums of squares	Mean square	F ratio	p
Main effects	4	68167.95	17041.99	24.06	.0001
Residual	543	384673.79	708.42		
Total	547	452841.75			

Hypothesis 1: Girls will report significantly higher fear intensity scores on the adapted Fear Survey Schedule for Children-Revised (FSSC-R) than boys.

Table 3 indicates that a significant difference exists between girls' and boys' fear intensity scores [F (1,543) = 90.50, p = .0001], thus supporting the hypothesis. The results indicate that girls report a significantly higher degree of fear intensity than boys.

Table 3

Results of Analysis of Variance: Fear Intensity by Gender, Age, Ethnicity, and Family-income Level

Source	Degrees of freedom	Type III sums of squares	F Ratio	p
Gender	1	64113.444	90.50	0.0001
Age	1	537.156	0.76	0.3843
Ethnicity	1	36.556	0.05	0.8204
Family-income level	1	2656.482	3.75	0.0533

Hypothesis 2: A significant difference will exist between fear intensity scores on the adapted FSSC-R for 8- to 9-year olds and 10- to 11-year olds.

Table 3 indicates that no significant difference exists in the intensity scores on the adapted FSSC-R for 8- to 9-year olds compared with 10- to 11-year olds [F (1,543) = .76, p = .3843], thus the hypothesis was not supported. The results indicate that 8- to 9-year olds do not report a significantly different degree of fear intensity than do 10- to 11-year olds.

Hypothesis 3: A significant difference will exist between African-American and Caucasian children's intensity scores on the adapted FSSC-R.

Table 3 indicates that no significant difference exists between African-American and Caucasian children's intensity scores on the adapted FSSC-R [F (1,543) = .05, p = .8204], thus the hypothesis was not supported. The results indicate that African-American children do not report a significantly different degree of fear intensity than do Caucasian children.

Hypothesis 4: A significant difference will exist between the intensity scores on the adapted FSSC-R of children determined to have a low family-income level and children not classified as having a low family-income level.

Table 3 indicates that no significant difference exists between intensity scores on the adapted FSSC-R [F (1,543) = .05, p = .0533] of children determined to have a low family-income level and children not classified as having a low family-income level, thus the hypothesis was not supported. The results indicate that children determined to have a low family-income level do not report a significantly different degree of fear intensity than do children not classified as having a low family-income level.

An analyses of variance was used to determine significant main effects of gender, age, ethnicity, and family-income on fear frequency. The results presented in Table 4 indicate an overall significant main effect for one or more of the independent variables [*F* (4,543) = 15.92, *p* = .0001].

Table 4

Results of Analyses of Variance: Fear Frequency by Gender, Age, Ethnicity, and Family-income Level

Source	Degrees of freedom	Sums of squares	Mean square	*F* ratio	*p*
Main effects	4	51048.93	12762.23	15.92	.0001
Residual	543	435352.95	801.75		
Total	547	486401.89			

Hypothesis 5: Girls will report significantly higher fear frequency scores on the adapted Fear Survey Schedule for Children-Revised (FSSC-R) than boys.

Table 5 indicates that a significant difference exists between girls' and boys' frequency scores on the adapted

FSSC-R [F (1,543) = 42.04, p = .0001], thus the hypothesis was supported. The results indicate that girls do report a significantly higher degree of fear frequency than do boys.

Table 5

Results of Analysis of Variance: Fear Frequency by Gender, Age, Ethnicity, and Family-income Level

Source	Degrees of freedom	Type III Sums of squares	F ratio	p
Gender	1	33703.489	42.04	0.0001
Age	1	2868.373	3.58	0.0591
Ethnicity	1	3118.334	3.89	0.0491
Family-income level	1	4733.643	5.90	0.0154

Hypothesis 6: A significant difference will exist between fear frequency scores on the adapted FSSC-R for 8- to 9-year olds and 10- to 11-year olds.

Table 5 indicates that no significant difference exists in the frequency scores on the adapted FSSC-R for 8- to 9-year olds compared with 10- to 11-year olds [F (1,543) = 3.58, p = .0591], thus the hypothesis was not supported.

The results indicate that 8- to 9-year olds do not report a significantly different degree of fear intensity than do 10- to 11-year olds. The low probability level may indicate that some differences exist between these two groups.

Hypothesis 7: A significant difference will exist between African-American and Caucasian children on the frequency scores of the adapted FSSC-R.

Table 5 indicates that no significant difference exists between African-American and Caucasian children's frequency scores on the adapted FSSC-R [F (1,543) = 3.89, p = .0491], thus the hypothesis was not supported. The results indicate that African-American children do not report a significantly different degree of fear frequency than do Caucasian children.

Hypothesis 8: A significant difference will exist between the frequency scores on the adapted FSSC-R of children determined to have a low family-income level and children not classified as having a low family-income level.

Table 5 indicates that no significant difference exists between the frequency scores on the adapted FSSC-R of children determined to have a low family-income level and children not classified as having a low family-income level [F (1,543) = 5.90, p = .0154], thus the hypothesis was not supported. The results indicate that children determined to

have a low family-income level do not report a significantly different degree of fear frequency than do children not classified as having a low family-income level.

Analyses of variance was used to determine significant main effects of gender, age, ethnicity, or family-income on Total Fear. The results presented in Table 6 indicate an overall significant main effect for one or more of the independent variables [F (4,543) = 19.72, p = .0001].

Table 6

Results of Analyses of Variance: Total Fear by Gender, Age, Ethnicity, and Family-income Level

Source	Degrees of freedom	Sums of squares	Mean square	F ratio	p
Main effects	4	703012.432	175753.108	19.72	.0001
Residual	543	4838729.770	8911.104		
Total	547	5541742.209			

Table 7 indicates that a significant difference exists between girls' and boys' total fear scores on the adapted FSSC-R [F (1,543) = 65.05, p = .0001]. The results indicate that girls do report a significantly different degree of total fear than do boys.

Table 7

Results of Analysis of Variance: Total Fear by Gender, Age, Ethnicity, and Family-income Level

Source	Degrees of freedom	Type III Sums of squares	F ratio	p
Gender	1	579706.379	65.05	0.0001
Age	1	17027.162	1.91	0.1674
Ethnicity	1	6960.263	.78	0.3772
Family-income level	1	54366.543	6.10	0.0138

Table 7 indicates that no significant difference exists between 8- to 9-year olds' and 10- to 11-year olds' total fear scores on the adapted FSSC-R [F (1,543) = 1.91, p = .1674]. The results indicate that 8- to 9-year olds do not report a significantly different degree of total fear than do 10- to 11-year olds. Table 7 also indicates that no significant difference exists between African-American and Caucasian children's total fear scores on the adapted FSSC-R [F (1,543) = .78, p = .3772]. The results indicate that African-American children do not report a significantly different degree of total fear than Caucasian children.

Table 7 indicates that no significant difference exists between the total fear scores on the adapted FSSC-R of children determined to have a low family-income level and children not classified as having a low family-income level [F (1,543) = 6.10, p = .0138]. The results indicate that children determined to have a low family-income level do not report a significantly different degree of total fear than do children not classified as having a low family-income level, although results are suggestive that differences may exist.

Investigation of Interactions

In order to investigate the possibility of interactions, a comparison of the proportion of variance accounted for in the dependent variables was made between a three-way interaction model versus a no interaction model (Pedhazur, 1982). A full interaction model was not considered due to several extremely small cells (see Table 8).

Table 8

Number of Participants By Ethnicity, Gender, and Family-Income Level

	Family-Income Level			
	Non-low		Low	
Participants	Males	Females	Males	Females
African-American	19	15	26	38
Caucasians	188	189	39	34
Total	207	204	65	72

Table 9 indicates the results of these statistical analyses. The three-way interaction models accounted for approximately two percent more of the variance in the three dependent variables than the no interaction models. All three statistical tests indicated that this additional two percent of the variance was not significant.

Table 9

Results of Statistical Analyses Comparing Three-way Interaction Model Versus No Interaction Model

Dependent variable	R^2 no interaction	R^2 interaction	F	Degrees of freedom	p
Intensity	.151	.168	1.105	10, 533	.356
Frequency	.105	.129	1.512	10, 533	.131
Total fear	.127	.149	1.451	10, 533	.155

Although there were no significant two-way or three-way interactions, the relationship between gender, ethnicity, and family-income level for frequency is worth noting. As demonstrated in Figure 1, the mean for low income Caucasian females is much higher than non-low income Caucasian females while the means of Caucasian males, African-American males, and African-American females of both income levels tend to be clustered together. This pattern was also evident with intensity means and total fear means.

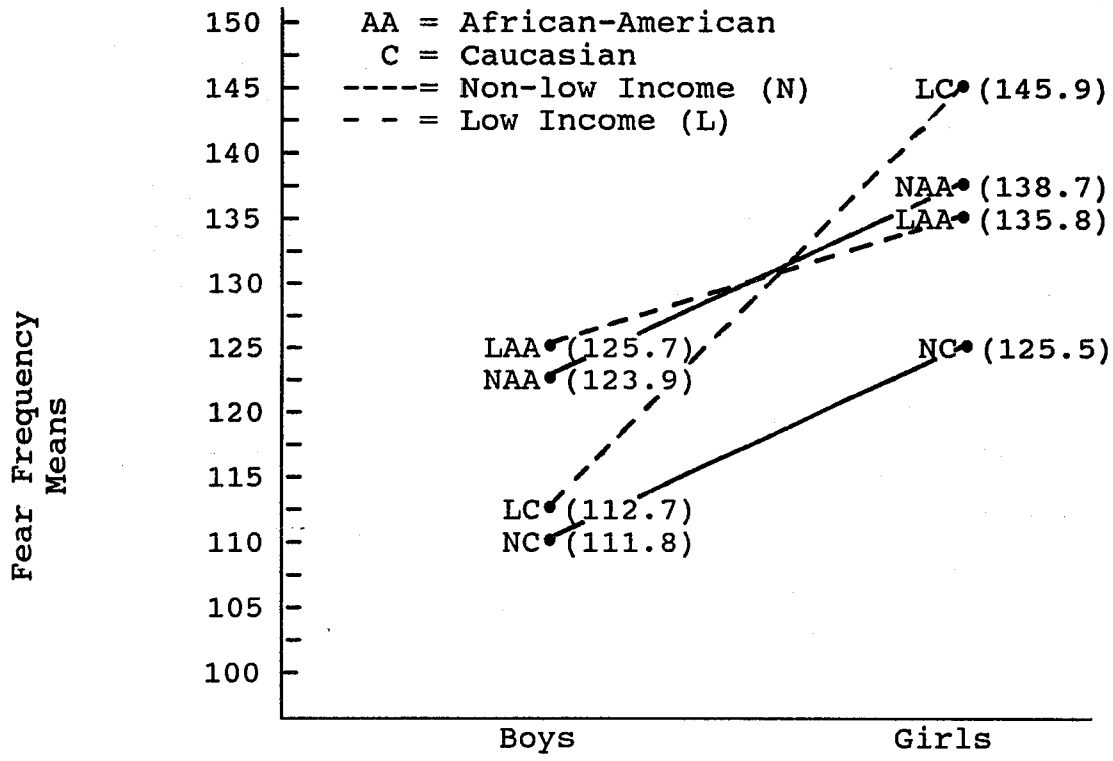

Figure 1: Fear Frequency Means: Gender by Family-income Level and Ethnicity

Mean Fear Responses

In order to address the research questions outlined in Chapter I, mean fear responses are reported by gender, age, ethnicity, and family-income level. Fear prevalence, fear incidence, and total fear were determined using an item-by-item two-way contingency table and are reported by gender,

age, ethnicity, and family-income level. Mean number of intense fears, frequent fears, and total fears are reported by gender, age, ethnicity, and family-income level.

Table 10 indicates the adapted FSSC-R fear intensity, fear frequency, and total fear means by gender, age, ethnicity, and family-income level. Girls had the highest level of fear intensity with a mean of 147.29 (SD = 26.73) and the highest level of total fear with a mean of 265.31 (SD = 102.95). African-American children had the highest level of fear frequency with a mean of 131.27 (SD= 26.30). Boys scored the lowest on all three measures with a fear intensity mean of 125.97 (SD = 26.97), fear frequency mean of 114.28 (SD = 27.21), and total fear mean of 200.89 (SD = 87.49).

Table 10

Mean FSSC-R Fear Intensity, Fear Frequency, and Total Fear Scores by Gender, Age, Ethnicity, and Family-income Level.

		Intensity		Frequency		Total Fear	
Participants	N	Mean	SD	Mean	SD	Mean	SD
Gender							
Boys	275	125.97	26.97	114.28	27.21	200.89	87.49
Girls	281	147.29	26.73	130.05	30.27	265.31	102.95
Age in years							
8	174	135.19	31.01	121.49	30.18	227.45	102.92
9	178	139.83	29.59	126.14	29.92	246.97	102.72
10	177	134.73	25.36	119.01	28.36	224.54	93.33
11	27	139.59	31.05	122.81	35.04	241.26	116.69
Ethnicity							
African-American	98	139.21	25.42	131.27	26.30	254.13	86.04
Caucasians	450	136.30	29.45	120.18	30.19	228.87	103.09
Other	8	131.25	37.18	128.25	32.55	237.25	119.48
Family-income Level							
Low	141	141.00	29.79	130.04	31.63	256.46	107.58
Non-low	415	135.30	28.45	119.61	28.76	225.62	97.32
Total	556	136.74	28.87	122.25	29.83	233.44	100.82

Prevalence of Fear

Fear prevalence for the total group and for each of the variables examined (i.e., gender, age, ethnicity, and family-income level) was determined by calculating the total number of items that each child endorsed as producing a high

degree of fear. An item-by-item two-way contingency table analysis was conducted to determine fear items that had the highest prevalence of fear (intensity). Table 11 indicates the most commonly feared items by gender and age based on percentage of respondents who gave that particular item a rating of 3 ("A lot"). Table 12 presents the most commonly feared items for African-American children, Caucasian children, low and non-low family-income levels, and the total based on the percentage who gave that particular item a rating of 3 ("A lot").

Table 11

Percentage of Participants Rating Intensity Items "A Lot" by Gender and Age

Item Description	Boys N=275	Girls N=281	Age 8 N=174	9 N=178	10 N=177	11 N=27
Not being able to breathe	62	77	68	71	70	63
Being hit by a car or truck	58	75	66	69	67	59
Nuclear war	53	70	52	62	72	52
Being in an earthquake	51	66	57	60	58	56
Being invaded or in a bombing attack	47	64	52	55	61	44
A burglar breaking into your house	41	70	44	61	60	74
Falling from high places	43	66	55	58	52	52
Fire-getting burned	43	63	45	57	56	56
Getting a serious illness-germs	38	54	43	47	49	41
Getting a shock from electricity	36	54	42	50	44	44
Getting lost in a strange place	36	55	44	54	38	44
Being sent to the principal	34	51	46	45	35	59
Getting bad grades	30	43	30	42	35	56
Hearing about death or dead people	27	47	39	43	29	37

Table 12

Percentage of Participants Rating Intensity Items "A Lot" by Ethnicity and Family-Income Level

Item Description	African-American N=98	Caucasian N=450	Low income N=141	Non-low income N=415	Total N=556
Not being able to breathe	67	70	71	69	69
Being hit by a car or truck	63	68	70	66	67
Nuclear war	57	63	64	61	62
Being in an earthquake	62	58	67	56	59
Being invaded or in a bombing attack	58	55	60	54	56
A burglar breaking into your house	51	57	60	55	56
Falling from high places	58	54	59	53	55
Fire-getting burned	56	52	58	51	53
Getting a serious illness-germs	47	46	47	46	46
Getting a shock from electricity	49	44	58	66	45
Getting lost in a strange place	41	47	45	46	45
Being sent to the principal	43	43	45	42	43
Getting bad grades	34	37	37	37	37
Hearing about death or dead people	49	34	47	33	37

The item eliciting the greatest degree of fear from the total group of students was "Not being able to breathe," which was selected by 69% of the total group. The percentage response to this item by subgroup was relatively consistent: 69% of non-low family-income participants, 62% of the boys, 77% of the girls, and 71% of the low family-income participants. Other common fears included "Being hit by a car or truck," which was selected by 67% of the total group of students. "Nuclear war" was selected by 62% of the total group of students, and "Being in an earthquake," was selected by 59% of the total group of students. All subgroup responses to these items were relatively consistent and ranged in percentage response rates from 51% to 70%.

To further investigate group differences, an item-by-item two-way contingency table analysis was conducted to determine the high prevalence fear items by combined gender/ethnicity (Table 13). Sixty-four percent of African-American boys, 70% of African-American girls, 61% of Caucasian boys, and 79% of Caucasian girls reported that "Not being able to breathe" was something they feared "A lot." Caucasian girls had the highest percentage of fearfulness of "Being hit by a car or truck," "A burglar breaking into your house," "Nuclear war," "Being in an earthquake," "Falling from high places," "Fire-getting burned," and "Getting lost in a strange place."

Table 13

Percentage of Participants Rating Intensity Items "A Lot" by Gender and Ethnicity

Item description	African-American Boys N=45	African-American Girls N=53	Caucasian Boys N=227	Caucasian Girls N=223
Not being able to breathe	64	70	61	79
Being hit by a car or truck	60	66	58	78
A burglar breaking into your house	29	70	44	71
Nuclear war	56	58	52	73
Being in an earthquake	60	64	48	67
Being invaded or in a bombing attack	47	68	47	64
Falling from high places	53	62	41	68
Fire-getting burned	51	60	41	64
Getting a serious illness-germs	36	57	39	54
Getting a shock from electricity	40	57	34	54
Getting lost in a strange place	36	45	36	58
Hearing about death or dead people	33	62	25	43
Bears or wolves	24	58	27	45

When compared with the other three groups, African-American girls reported the highest percentage of fear with regard to "Being invaded or in a bombing attack," "Getting a serious illness-germs," "Getting a shock from electricity," "Hearing about death or dead people," and "Bears or wolves." The percentage of fear intensity for African-American boys and Caucasian boys was fairly similar. The exception was "A burglar breaking into your house" where only 29% of African-American boys reported "A lot of fear," as compared with 44% of the Caucasian boys.

Subtle differences between these groups emerged. Fifty-eight percent of African-American girls fear bears or wolves as compared with 24% of African-American boys, 27% of Caucasian boys and 45% of Caucasian girls. Another distinction emerged with the item "A burglar breaking into your house," with only 29% of African-American boys expressing a lot of fear while 70% of African-American girls expressed this as something they fear a lot.

Incidence of Fear

Fear incidence for the total group and for each of the variables examined (i.e., gender, age, ethnicity, and family-income level) was determined by calculating the total number of items that each child endorsed as producing a frequent level of fear. An item-by-item two-way contingency table analysis was also conducted to determine those fear

items that caused the highest incidence of fear (frequency). Table 14 presents the most common fear items by gender and age based on the percentage who gave that particular item a rating of 3 ("A Lot of the Time"). Table 15 presents the most common fear items for African-American children, Caucasian children, low family-income level, and non-low family-income level based on the percentage who gave that particular item a rating of 3 ("A Lot of the Time").

Most of the same fears selected as intensely feared are also chosen as most frequently feared. However, "Failing a test" was selected as a frequent fear by 30% of the African-American children and girls, 33% of 11-year olds, and 24% of the total group of participants, but did not appear as one of the top intensely feared items. "Guns" also appeared in the top 13 most frequently feared items, chosen by 34% of African-American children and 23% of the total, but did not appear as one of the top intense fears.

Forty-one percent of the total participants reported they most frequently feared "Not being able to breathe," which was also the most frequently selected fear for 37% of the boys, 43% of the 8-year olds, 46% of the 9-year old participants, 55% of the African-American children, and 38% of the Caucasian children.

Table 14

Percentage of Participants Rating Frequency Items "A Lot of the Time" by Gender and Age

Item description	Boys N=275	Girls N=281	Age 8 N=174	9 N=178	10 N=177	11 N=27
Not being able to breathe	37	44	43	46	36	22
A burglar breaking into your house	26	45	33	39	36	30
Being hit by a car or truck	29	41	35	40	30	37
Nuclear war	25	34	28	34	29	18
Falling from high places	23	36	29	34	28	26
Fire-getting burned	24	35	29	35	27	22
Being in an earthquake	25	31	33	30	21	26
Being invaded or in a bombing attack	25	29	25	31	28	18
Failing a test	17	30	18	28	24	33
Getting a serious illness-germs	17	33	25	24	27	22
Getting a shock from electricity	19	27	25	26	18	22
Guns	15	31	21	28	21	19
Hearing about death or dead people	18	28	21	28	21	22

Table 15

Percentage of Participants Rating Frequency Items "A Lot of the Time" by Ethnicity and Family-income Level

Item description	African-American N=98	Caucasian N=450	Low Income N=141	Non-low Income N=415	Total N=556
Not being able to breathe	55	38	53	37	41
A burglar breaking into your house	38	35	43	34	36
Being hit by a car or truck	48	32	43	33	35
Nuclear war	41	27	38	27	30
Falling from high places	45	27	40	27	30
Fire-getting burned	40	27	38	27	30
Being in an earthquake	39	26	45	23	28
Being invaded or in a bombing attack	42	24	40	23	27
Failing a test	30	22	29	22	24
Getting a serious illness-germs	41	22	36	21	25
Getting a shock from electricity	35	21	33	20	23
Guns	34	21	29	21	23
Hearing about death or dead people	38	20	36	19	23

The item reported most frequently feared by 45% of the girls and 36% of the ten-year olds was "A burglar breaking into your house" while 37% of 11-year olds reported that

their top fear was "Being hit by a car or truck." Several fears, "Riding in the car or bus," "Talking on the telephone," "Seeing bats or birds," "Making mistakes," "Getting a haircut," received no high ratings, indicating that these items were not frequently feared.

By combining the most frequently feared items by gender and ethnicity, subtle differences regarding specific fears becomes more evident. Table 16 shows the most frequent fears of African-American boys, African-American girls, Caucasian boys, and Caucasian girls. Forty-six percent of Caucasian girls reported that they frequently feared "A burglar breaking into your house." The most frequent fear of 33% of Caucasian boys, 58% of African-American boys, and 53% of African-American girls was "Not being able to breathe."

Table 16

Percentage of Participants Rating Frequency Items "A Lot of the Time" by Gender and Ethnicity

Item Description	African-American Boys N=45	African-American Girls N=53	Caucasian Boys N=227	Caucasian Girls N=223
Not being able to breathe	58	53	33	42
Being hit by a car or truck	51	45	24	41
A burglar breaking into your house	31	43	25	46
Falling from high places	44	45	19	35
Nuclear war	42	39	21	33
Fire-getting burned	40	40	20	34
Being invaded or in a bombing attack	44	39	21	27
Being in an earthquake	44	34	21	30
Getting a serious illness-germs	33	47	14	30
Hearing about death or dead people	36	39	14	26
Getting a shock from electricity	31	38	17	25
Guns	24	41	13	29
Failing a test	19	36	15	29
Having your parents argue	31	23	11	27

Comparisons indicated that 40% of the African-American boys frequently fear "Fire-getting burned" as compared with 20% of the Caucasian boys. In all but 5 of the top 14 fears, African-American boys were twice as likely to endorse certain fears than were Caucasian boys. African-American girls, however, when compared with Caucasian girls were slightly to moderately higher in all but two instances: "A burglar breaking into your house" and "Having your parents argue."

Total Fear Scores

Total fear effect was determined by calculating the total number of items each child selected as producing a high degree of fear on a frequent basis. In order to determine the fear items that were most often ranked as both highly and frequently feared, an item-by-item multiplicative combination analysis was utilized (L. Bond, personal communication, June 13, 1994). Table 17 indicates the 10 most intensely and frequently feared items and the percentage of total participants who selected these fears as eliciting "A lot" of fear and causing fear "A lot of the time."

Table 17

Percent of Participants Rating Top Ten Combined Intensity and Frequency Items "A Lot" and "A Lot of the Time"

Item description	Percent
Not being able to breathe	37
A burglar breaking into your house	31
Being hit by a car or truck	31
Falling from high places	25
Fire-getting burned	25
Being in an earthquake	25
Nuclear war	25
Being invaded or in a bombing attack	22
Getting a serious illness-germs	19
Failing a test	19

As Table 17 indicates, "Not being able to breathe" was reported to be the most intensely and frequently feared item. Thirty-seven percent of the participants experienced a high level of fear prevalence and fear incidence for "Not being able to breathe." Slightly less than one-third of the total group highly feared "A burglar breaking into your house" and "Being hit by a car or truck."

One fourth of the participants frequently and intensely fear "Falling from high places," "Fire-getting burned," "Being in an earthquake," and "Nuclear war." Twenty-two percent frequently and intensely fear "Being invaded or in a bombing attack" and slightly less than 20% fear "Getting a serious illness-germs" and "Failing a test."

Mean Number of Fears

Table 18 indicates the mean number of fears indicating prevalence, incidence, and total fears by gender, age, ethnicity, and family income level. The mean number of intense fears for all participants was 17.13. Compared with other groups, girls had the highest average number of intense fears ($\underline{M}$ = 21.38) while boys had the lowest average number of intense fears ($\underline{M}$ = 12.80). The highest average of fear frequency was reported by low family-income participants with a mean of 14.62 fears. The lowest average of fear frequency was reported by boys with a mean of 8.15 fears. The highest average of total fears was reported by low family-income participants with a mean of 9.51 fears. The lowest average of total fear was reported by boys with a mean of 5.01 fears.

Table 18

Mean and Standard Deviation of Intense Fears by Gender, Age, Ethnicity, and Family-Income Level.

Participants	N	Intensity	SD	Frequency	SD	Total	SD
Gender							
Boys	275	12.80	10.96	8.15	9.96	5.03	6.77
Girls	281	21.38	13.65	12.84	14.03	9.16	11.19
Age							
8	174	17.56	14.16	10.90	13.25	6.87	9.92
9	177	18.39	13.44	11.59	12.31	7.95	9.27
10	178	15.30	11.38	9.12	11.54	6.47	9.20
11	27	18.15	13.78	10.26	12.62	7.44	10.15
Ethnicity							
African-American	98	18.81	11.37	14.41	11.04	9.22	8.21
Caucasians	450	16.84	13.42	9.66	12.54	6.67	9.72
Other	8	13.00	14.41	11.25	12.58	6.25	8.50
Family-income level							
Low	141	19.96	13.81	14.62	14.45	9.51	10.79
Non-low	415	15.71	12.37	9.31	11.66	6.07	8.56
Total	556	17.13	13.16	10.52	12.40	7.12	9.49

CHAPTER V

SUMMARY, LIMITATIONS, CONCLUSIONS, RECOMMENDATIONS, AND IMPLICATIONS

Chapter V consists of five sections: summary of the research, conclusions that may be derived from the study, limitations of the study, recommendations, and implications for school counselors and educators.

Summary

This study was an investigation of the intensity and frequency of children's fears; it examined the impact of gender, age, ethnicity, and family-income level on reported fears. Researchers in the past have addressed the intensity of children's fear (King & Ollendick, 1988) and investigated the influence of age (Ollendick, 1983; Ollendick et al., 1989), gender (Ollendick et al., 1989), and, to a limited degree, the impact of ethnicity (Lapouse & Monk, 1959) and family-income level (King et al., 1988) on children's fears. One study addressed fear frequency (McCathie & Spence, 1991), but no reported studies have examined the combined effect of fear intensity and fear frequency. Previous researchers also focused primarily on Caucasian children from moderate-income families. This study, which explored fear intensity, fear frequency, and the combination of fear intensity and fear frequency (total fear), provided

previously unexplored comparisons between Caucasian and African-American children and between low and non-low family income level individuals.

With regard to gender, the findings indicated that a majority of girls' and boys' intense fears are similar to results obtained by Ollendick et al. (1985). The findings also indicate that a moderate percentage of boys and girls frequently fear "Not being able to breathe," "A burglar breaking into your house," "Being hit by a car or truck," "Nuclear war," "Falling from high places," "Fire-getting burned," "Being in an earthquake," and "Being invaded or in a bombing attack." By combining both intensity and frequency, which is an aspect of fear that was not addressed in previous research, these same items yielded a high degree of fear in 25% to 37% of the total group.

Gender Differences

Distinct gender differences concerning fear intensity and fear frequency were determined. Girls consistently reported higher fear intensity and fear frequency than did boys. Girls' fear intensity (M = 147.29), fear frequency (M = 130.05), and total fear (M = 265.31) scores were significantly higher than boys' fear intensity (M = 125.97), fear frequency (M = 114.28), and total fear (M = 200.89) scores.

The average number of reported fears was consistently higher for girls than for boys. Girls reported an average of 21.38 intense fears, 12.84 frequent fears, and 9.16 total fears, whereas boys averaged 12.80 intense fears, 8.15 frequent fears, and 5.01 total fears.

In combination, the higher intensity, frequency, and number of fears in girls suggest that when compared with boys, girls report a greater degree of fear more often and fear more objects or situations than do boys. These results are consistent with the literature. Ollendick et al. (1985), who examined self-reported intensity of fear for girls and boys between the ages of 7 and 18, found that girls reported more fears and an overall higher intensity of fears than did boys. Girls reported an average of 16 fears while boys reported approximately half as many. King et al. (1990) found that girls ($\underline{M}$ = 18.2) reported a significantly greater number of fears than did boys ($\underline{M}$ = 11.4).

In the present study, the content of girls' fears also seemed to differ somewhat from boys' fears. An assessment of the 14 most commonly selected intensity items indicated that only the first five of the top 14 items (i.e., "Not being able to breathe," "Being hit by a car or truck," "Nuclear war," "Being in an earthquake," and "Being invaded or in a bombing attack") were ranked the same for both boys and girls. An assessment of the 13 most commonly chosen

frequency items indicated that only the top item (i.e., "Not being able to breathe") was ranked the same for both boys and girls.

Age Differences

No distinct age differences for fear intensity, fear frequency, and total fear were found. Results indicated that 8-, 9-, 10-, and 11-year olds' fear intensity and frequency means did not differ significantly. Fear intensity means ranged from 134.73 to 139.83, fear frequency means ranged from 119.01 to 126.14, and total fear means ranged from 246.97 to 224.54.

The means for fears that were intensely feared varied among 8- through 11-year olds, with the average number of intense fears slightly higher for 9-year olds ($\underline{M}$ = 18.39) and 11-year olds ($\underline{M}$ = 18.15) compared with 8-year olds ($\underline{M}$ = 17.56) and 10-year olds ($\underline{M}$ = 15.30). The average number of frequent fears was slightly higher for 9-year olds ($\underline{M}$ = 11.59), 8-year olds ($\underline{M}$ = 10.90), and 11-year olds ($\underline{M}$ = 10.26) compared with 10-year olds ($\underline{M}$ = 9.12). The average number of total fears were slightly higher for 9-year olds ($\underline{M}$ = 7.95) and 11-year olds ($\underline{M}$ = 7.44) compared with 8-year olds ($\underline{M}$ = 6.87) and 10-year olds ($\underline{M}$ = 6.47). These results are not consistent with previous literature. Ollendick (1983) found that children between the ages of 8

and 11 had an average of 11 intense fears, whereas Ollendick et al. (1985) found an average of 13 intense fears among children.

Ethnic Differences

Moderate but nonsignificant ethnic differences in fear intensity and fear frequency were found. Results indicated that African-American children's and Caucasian children's intensity scores did not differ significantly. African-American children's fear intensity mean (139.21) was not significantly different from Caucasian children ($\underline{M}$ = 136.3). African-American children's fear frequency mean (131.27) was higher, although not significantly higher than Caucasian children (120.18). African-American children's total fear mean (254.13) was higher, although not significantly higher than Caucasian children (228.87).

An assessment of the 14 most commonly chosen intensity items indicated that only the first two of the top 14 items (i.e., "Not being able to breathe" and "Being hit by a car or truck") were ranked the same for both African-American and Caucasian children. An assessment of the 13 most commonly chosen frequency items indicated that only the top item (i.e., "Not being able to breathe") was ranked the same for both African-American and Caucasian children. The average number of intense, frequent, and total fears was consistently higher for African-American children who

reported an average of 18.81 intense fears, 14.41 frequent fears, and 9.22 total fears than for Caucasian children who reported an average of 16.64 intense fears, 9.66 frequent fears, and 6.67 total fears.

Although differences were not significant, African-American children report being more fearful more often than do their Caucasian peers. These results are similar to previous findings. Lapouse and Monk (1959) found that 63% of the African-American children in their sample had seven or more fears as compared with 39% of the Caucasian children. Reynolds and Paget (1981) and Perrin and Last (1992), however, found no significant differences between African-American and Caucasian children with regard to fear intensity.

Family-Income Level Differences

There were no significant family-income level differences for fear intensity and fear frequency. Results indicated that children identified as having a low family-income level and children not classified as having a low family-income level did not differ significantly on fear intensity or fear frequency scores.

Low family-income children's fear intensity mean (141.00) was not significantly higher than non-low family-income children's fear intensity mean (135.30). Low family-income children's fear frequency mean (130.04) was not

significantly higher than non-low family-income children's fear frequency mean (119.61). Low family-income children's total fear mean (256.46) was not significantly higher than non-low family-income children's total mean (225.62).

An assessment of the 14 most commonly chosen intensity items indicated that only the first two (i.e., "Not being able to breathe" and "Being hit by a car or truck") of the top 14 items were ranked the same for both low family-income children and non-low family-income children. An assessment of the 13 most commonly selected frequency items indicated that only the top item (i.e., "Not being able to breathe") was ranked the same for both low family-income participants and non-low family-income participants. The average number of fears was consistently higher for low family-income children who reported an average of 19.96 intense fears, 14.62 frequent fears, and 9.51 total fears. Non-low family-income children's averages were 15.71 intense fears, 9.31 frequent fears, and 6.07 total fears.

Although these results were not significant, low family-income children report being more fearful, more often than their non-low family-income counterparts. These results are similar to those found by Jersild and Holmes (1933) and Nalven (1970) who found that children from lower family-income levels have more fears and different fears than those from higher family-income levels. However,

Perrin and Last (1992) found there were no significant effects for socioeconomic status when examining fear intensity.

Finally, analyses of variance were conducted to identify any significant main effects for Intensity, Frequency, and Total Fear Scores. The data analysis indicated that there were significant main effects for gender. Interactions among the four independent variables were also investigated, but no significant interactions were determined. For exploratory purposes, a factor analysis was conducted on the fear intensity and fear frequency instruments to determine factor structure. No clear factor structure emerged.

Limitations of the Study

The limitations of this study concern the use of self-reports and the generalization of findings to the general population. First, self-reports, which were a direct source of data gathering, are a widely used dependent measure, but they are susceptible to misrepresentation by the participant (Heppner, Kivlighan, & Wampold, 1992). The self-report of children's fears utilized in this study is viewed as a limitation; boys may have tended to report what is sociologically expected (Graziano et al., 1979). Second, the impact of history on the participant could have influenced the results. Finally, other limitations of the

study involve the voluntary nature of student participation. First, 35% of the 5-school student body participated in the study and, although generalizations cannot be made to the county-wide population, generalizations can be made to this population of children. A less important limitation was the voluntary nature of the study as a means for gaining participating schools. Fortunately, the participating schools and participating students were demographically representative of the elementary schools as a whole relative to gender: girls 51% and boys 49%; age: 8-year olds 31%, 9-year olds 32%, 10-year olds 32%, and 11-year olds 4%; ethnicity: African-Americans 18% and Caucasians 81%; and family-income level: non-low 75% and low 25%.

Conclusions

The results of this study were both anticipated and unanticipated. The finding that girls had more mean fears and reported more fear intensity and fear frequency than boys was anticipated. Although not significant, fear frequency differences between African-American children and Caucasian children were unanticipated, as were the differences between low and non-low family-income level girls.

Previous studies (Ollendick, 1983) which focused on fears of children primarily examined the intensity of fears; they did not reflect how often children experienced a

specific fear. McCathie and Spence (1991) were the first researchers to question whether past studies were measuring the frequency of children's fears. They combined the dimensions of intensity, frequency, and avoidance into one instrument but, because of the design of their instrument, they may have ignored some valuable data and may not have been able to identify the frequency response.

The results of this study, which were obtained through attention to fear frequency and testing for differences between independent variables, add to the literature on children's fears. Children between the ages of 8 and 11 fear situations that cause physical harm the most. However, because they reported that they may not fear these situations on a day-to-day basis, the level of fearfulness appears to be somewhat less than was previously reported (King & Ollendick, 1992; Ollendick, 1983; 1988). In addition, a child who expresses a high degree/high frequency of fear regarding a situation is perhaps indicating a stronger fear than a child who expresses a high degree/low frequency of fear. For example, 69% of the total participants reported that they had "A lot" of fear concerning "Not being able to breathe." However, only 41% reported this was feared "A lot of the time." Furthermore, 37% reported that they feared "Not being able to breathe" both "A lot" and "A lot of the time." Using fear frequency

and total fear to provide further information about an individual's reported fear produces a clearer picture of the intensity of the fear and how often that individual is afraid.

The fears most commonly reported were similar to those reported by past researchers (King et al., 1988; King et al., 1992; Ollendick, 1983; Ollendick et al., 1985). Ollendick et al. (1985) also found that children in the 8- to 11-year old age group tended to fear situations related to injury, natural events, and social situations. With reported intensity and frequency in this study, the top fears involved situations related to injury (i.e., "Not being able to breathe;" "A burglar breaking into your house;" "Being hit by a car or truck"), natural events (i.e., "Nuclear war;" "Fire-getting burned), and social situations (i.e., "Failing a test;" "Being sent to the principal's office;" "Getting bad grades").

Previous fear research was limited in scope; it only focused on specific fears and fear intensity. By examining differences between fear intensity and fear frequency, the results of this study add a new dimension to the fear literature. The most striking difference between fear intensity and fear frequency was that fear frequency was consistently lower than fear intensity when conducting group comparisons. It would appear from this study that gathering

fear data without the use of a frequency instrument would not give the researcher a complete picture of children's fears.

Recommendations for Further Research

Future research, based on the results of this study, needs to include contemporary fear issues. Topical and sensitive issues such as AIDS, parent separation and divorce, death issues, and violence issues are contemporary problems which today's children might fear. Expanding current assessments or creating new instruments that allow counselors and educators to determine contemporary fears could provide opportunities for further clarification of children's specific fears. Determining contemporary fears could be accomplished by individual interviews with children and experts in the field of children's fears.

Minority groups need adequate representation during these interviews as their fears may differ from non-minority groups. Although significant differences concerning ethnicity were not found in this study, consistent patterns emerged. Analyses of variance using equal sample sizes would allow further exploration of differences due to racial backgrounds, varying income levels, and geographical locations (e.g., urban versus rural).

Implications for Counselors

Results of this study support findings from the literature that children report specific fears and fear intensity. The results also indicate that these same children report varying degrees of fear frequency. The majority of reported intense and frequent fears indicate children's apprehension for their physical safety regardless of gender, age, ethnicity, or family-income level. Educators and counselors working with children of this age need to recognize and address these specific fears through individual and small-group counseling.

The results indicate that some specific differences exist among demographic groups. Counselors who work with children need to be aware of subtle fear differences that exist between gender, ethnic groups, and socioeconomic levels and the developmentally appropriate fears that exist among specific age groups. Previous studies viewed fear frequency from a developmental perspective (i.e., fears which are typically frequent for specific age groups).

Primary, secondary, and tertiary intervention efforts have been used by counselors in their work concerning children's fears (Johnson & Melamed, 1979). Primary intervention includes raising awareness of children's fears. Educators' and children's secondary intervention includes group discussions that allow children not only to express

fears and to recognize that others share some of the same fears. Tertiary intervention involves counseling children who are experiencing a high degree or frequency of fear, and helping them deal with their fears effectively.

Primary intervention can be achieved through administration of adapted versions of the FSSC-R. They are valuable tools for use by school counselors to identify specific fears in children, comparing individual fear scores, and comparing groups of children. Once the instrument has been administered, secondary intervention can take place as counselors discuss the results with parents, teachers, and children. Children can be made aware of their specific fears and can recognize that fears are a normal reaction to certain situations. By openly discussing what is causing them to be fearful, children have an opportunity to see that others share their fears which can help alleviate some of the underlying fear.

Tertiary intervention occurs when children who are experiencing a high degree of fear are identified and encouraged to seek counseling either through individual or small group counseling at the school. If the reaction meets the criteria for a phobic diagnosis, an outside referral may be appropriate. School counselors can assist fearful children, either through counseling the child or through the use of modeling by other children, teach the child self-

instructional techniques, or provide an environment that allows open discussion which may help the child cope effectively with fear (Johnson & Melamed, 1979).

Children of the 1990s face complex issues. Variables that may indicate further differentiation in fear intensity and frequency may involve health issues, the marital status of a child's parents, a child's experience with death, and urban versus rural environment. By their accessibility, school counselors have an opportunity to help children recognize and discuss their fears in an atmosphere of safety.

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Appendix A: Parent Permission Form

THE UNIVERSITY OF NORTH CAROLINA
GREENSBORO

School of Education
Department of Counseling
and Educational Development

Date

Dear Parents:

You may have noticed that recent issues of Newsweek and Readers' Digest contained articles that dealt with children's fears. Children's fears are not something new; as a matter of fact, they are a natural part of childhood. As adults we are often so busy with day-to-day living that we do not have an opportunity to sit down and ask our children what types of objects or activities make them fearful. A survey is being conducted in Alamance County as a way of determining children's fears.

Your child's school has been chosen to participate in this study that will give third, fourth, and fifth graders the chance to express their fears. The survey will take about forty-five minutes to complete. After all the classes have participated, the school's results will be added to the results for the school system. Because the survey may involve more than 1000 students, individual reports will not be possible.

***Confidentiality is our utmost concern.** It is important to note that no names of students or teachers will ever be used.*

Thank you for taking the time to read and think about this important issue. In order for your child to participate, you will need to fill out and sign the form below and send it back to your child's teacher. If we do not receive a signed form, your child cannot participate in this important survey.

If you wish to receive a copy of the system-wide results, please check the box below and a copy of the results will be sent to you through the school.

Sincerely,

Susan S. Crawford

Susan S. Crawford, M.Ed.

Please return this form to your child's teacher no later than Date

I give permission for my child, _____, to participate in the study on children's fears.

Signature of parent/legal guardian _____ *Date* _____ *Teacher's Name* _____

☐ *Check here if you would like a copy of the system-wide results.*

Curry Building UNCG Greensboro, NC 27412-5001
(910) 334-5100 • FAX (910) 334-5060

Appendix B: Fear Survey Schedule for Children-Revised

SELF-RATING QUESTIONNAIRE (FSSC-R)

Thomas H. Ollendick

Name_____ Age_____ Date_____

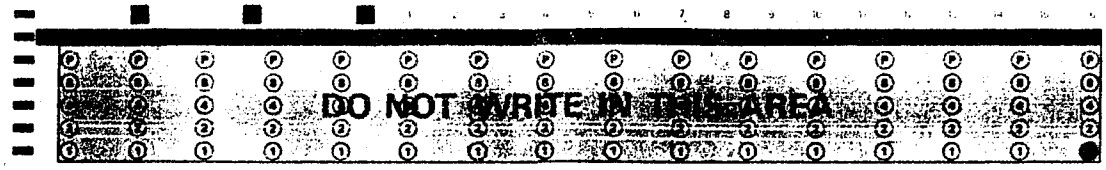
DIRECTIONS: A number of statements which boys and girls use to describe the fears they have are given below. Read each fear carefully and put an X in the box in front of the words that best describe your fear. There are no right or wrong answers. Remember, find the words which best describe how much fear you have.

1. Giving an oral report	☐ None	☐ Some	☐ A Lot
2. Riding in the car or bus	☐ None	☐ Some	☐ A Lot
3. Getting punished by mother	☐ None	☐ Some	☐ A Lot
4. Lizards	☐ None	☐ Some	☐ A Lot
5. Looking foolish	☐ None	☐ Some	☐ A Lot
6. Ghosts or spooky things	☐ None	☐ Some	☐ A Lot
7. Sharp objects	☐ None	☐ Some	☐ A Lot
8. Having to go to the hospital	☐ None	☐ Some	☐ A Lot
9. Death or dead people	☐ None	☐ Some	☐ A Lot
10. Getting lost in a strange place	☐ None	☐ Some	☐ A Lot
11. Snakes	☐ None	☐ Some	☐ A Lot
12. Talking on the telephone	☐ None	☐ Some	☐ A Lot
13. Roller coaster or carnival rides	☐ None	☐ Some	☐ A Lot
14. Getting sick at school	☐ None	☐ Some	☐ A Lot
15. Being sent to the principal	☐ None	☐ Some	☐ A Lot
16. Riding on the train	☐ None	☐ Some	☐ A Lot
17. Being left at home with a sitter	☐ None	☐ Some	☐ A Lot
18. Bears or wolves	☐ None	☐ Some	☐ A Lot
19. Meeting someone for the first time . . .	☐ None	☐ Some	☐ A Lot
20. Bombing attacks--being invaded	☐ None	☐ Some	☐ A Lot
21. Getting a shot from the nurse or doctor	☐ None	☐ Some	☐ A Lot
22. Going to the dentist	☐ None	☐ Some	☐ A Lot
23. High places like mountains	☐ None	☐ Some	☐ A Lot
24. Being teased	☐ None	☐ Some	☐ A Lot
25. Spiders	☐ None	☐ Some	☐ A Lot
26. A burglar breaking into our house	☐ None	☐ Some	☐ A Lot

27. Flying in a plane . . . . . ☐ None ☐ Some ☐ A Lot
28. Being called on by the teacher . . . . . ☐ None ☐ Some ☐ A Lot
29. Getting poor grades . . . . . ☐ None ☐ Some ☐ A Lot
30. Bats or birds . . . . . ☐ None ☐ Some ☐ A Lot
31. My parents criticizing me . . . . . ☐ None ☐ Some ☐ A Lot
32. Guns . . . . . ☐ None ☐ Some ☐ A Lot
33. Being in a fight . . . . . ☐ None ☐ Some ☐ A Lot
34. Fire--getting burned . . . . . ☐ None ☐ Some ☐ A Lot
35. Getting a cut or an injury . . . . . ☐ None ☐ Some ☐ A Lot
36. Being in a big crowd . . . . . ☐ None ☐ Some ☐ A Lot
37. Thunderstorms . . . . . ☐ None ☐ Some ☐ A Lot
38. Having to eat some food I don't like . . ☐ None ☐ Some ☐ A Lot
39. Cats . . . . . ☐ None ☐ Some ☐ A Lot
40. Failing a test . . . . . ☐ None ☐ Some ☐ A Lot
41. Being hit by a car or truck . . . . . ☐ None ☐ Some ☐ A Lot
42. Having to go to school . . . . . ☐ None ☐ Some ☐ A Lot
43. Playing rough games during recess . . . . ☐ None ☐ Some ☐ A Lot
44. Having my parents argue . . . . . ☐ None ☐ Some ☐ A Lot
45. Dark rooms or closets . . . . . ☐ None ☐ Some ☐ A Lot
46. Having to put on a recital . . . . . ☐ None ☐ Some ☐ A Lot
47. Ants or beetles . . . . . ☐ None ☐ Some ☐ A Lot
48. Being criticized by others . . . . . ☐ None ☐ Some ☐ A Lot
49. Strange looking people . . . . . ☐ None ☐ Some ☐ A Lot
50. The sight of blood . . . . . ☐ None ☐ Some ☐ A Lot
51. Going to the doctor . . . . . ☐ None ☐ Some ☐ A Lot
52. Strange or mean looking dogs . . . . . ☐ None ☐ Some ☐ A Lot
53. Cemeteries . . . . . ☐ None ☐ Some ☐ A Lot
54. Getting a report card . . . . . ☐ None ☐ Some ☐ A Lot
55. Getting a haircut . . . . . ☐ None ☐ Some ☐ A Lot
56. Deep water or the ocean . . . . . ☐ None ☐ Some ☐ A Lot
57. Nightmares . . . . . ☐ None ☐ Some ☐ A Lot
58. Falling from high places . . . . . ☐ None ☐ Some ☐ A Lot
59. Getting a shock from electricity . . . . ☐ None ☐ Some ☐ A Lot
60. Going to bed in the dark . . . . . ☐ None ☐ Some ☐ A Lot

61. Getting car sick . . . . . ☐ None ☐ Some ☐ A Lot
62. Being alone . . . . . ☐ None ☐ Some ☐ A Lot
63. Wearing clothes different from others . . ☐ None ☐ Some ☐ A Lot
64. Getting punished by my father . . . . . ☐ None ☐ Some ☐ A Lot
65. Having to stay after school . . . . . ☐ None ☐ Some ☐ A Lot
66. Making mistakes . . . . . ☐ None ☐ Some ☐ A Lot
67. Mystery movies . . . . . ☐ None ☐ Some ☐ A Lot
68. Loud sirens . . . . . ☐ None ☐ Some ☐ A Lot
69. Doing something new . . . . . ☐ None ☐ Some ☐ A Lot
70. Germs or getting a serious illness . . . ☐ None ☐ Some ☐ A Lot
71. Closed spaces . . . . . ☐ None ☐ Some ☐ A Lot
72. Earthquakes . . . . . ☐ None ☐ Some ☐ A Lot
73. Russia . . . . . ☐ None ☐ Some ☐ A Lot
74. Elevators . . . . . ☐ None ☐ Some ☐ A Lot
75. Dark places . . . . . ☐ None ☐ Some ☐ A Lot
76. Not being able to breathe . . . . . ☐ None ☐ Some ☐ A Lot
77. Getting a bee sting . . . . . ☐ None ☐ Some ☐ A Lot
78. Worms or snails . . . . . ☐ None ☐ Some ☐ A Lot
79. Rats or mice . . . . . ☐ None ☐ Some ☐ A Lot
80. Taking a test . . . . . ☐ None ☐ Some ☐ A Lot

Appendix C: Fear Survey Schedule for Children-Revised Intensity Version



INTENSITY

Directions:

A number of statements which boys and girls use to describe the fears they have are given below. Read each fear carefully and color the circle under the word or words that best describe your fear. There are no right or wrong answers. Remember, find the word or words that best describe how much fear you have.

NONE 1
SOME 2
A LOT 3
4
5

1. Giving an oral report	①	②	③	④	⑤
2. Riding in the car or bus	①	②	③	④	⑤
3. Getting punished by your mother	①	②	③	④	⑤
4. Seeing some lizards	①	②	③	④	⑤
5. Looking foolish	①	②	③	④	⑤
6. Ghosts or spooky things	①	②	③	④	⑤
7. Sharp objects	①	②	③	④	⑤
8. Having to go to the hospital	①	②	③	④	⑤
9. Hearing about death or dead people	①	②	③	④	⑤
10. Getting lost in a strange place	①	②	③	④	⑤
11. Seeing some snakes	①	②	③	④	⑤
12. Talking on the telephone	①	②	③	④	⑤
13. Riding a roller coaster	①	②	③	④	⑤
14. Getting sick at school	①	②	③	④	⑤
15. Being sent to the principal	①	②	③	④	⑤
16. Riding on a train	①	②	③	④	⑤
17. Being left at home with a sitter	①	②	③	④	⑤
18. Bears or wolves	①	②	③	④	⑤
19. Meeting someone for the first time	①	②	③	④	⑤
20. Being invaded or in a bombing attack	①	②	③	④	⑤
21. Getting a shot from the nurse/doctor	①	②	③	④	⑤
22. Going to the dentist	①	②	③	④	⑤
23. Being on high places, like a mountain	①	②	③	④	⑤
24. Being teased	①	②	③	④	⑤
25. Seeing a spider	①	②	③	④	⑤
26. A burglar breaking into your house	①	②	③	④	⑤
27. Flying in a plane	①	②	③	④	⑤
28. Being called on by the teacher	①	②	③	④	⑤
29. Getting bad grades	①	②	③	④	⑤
30. Seeing bats or birds	①	②	③	④	⑤
31. Your parents criticizing you	①	②	③	④	⑤
32. Guns	①	②	③	④	⑤
33. Being in a fight	①	②	③	④	⑤
34. Fire - getting burned	①	②	③	④	⑤
35. Getting a cut or an injury	①	②	③	④	⑤
36. Being in a big crowd	①	②	③	④	⑤
37. Thunderstorms	①	②	③	④	⑤
38. Having to eat food you don't like	①	②	③	④	⑤
39. Cats	①	②	③	④	⑤
40. Failing a test	①	②	③	④	⑤

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INTENSITY

Remember, find the word or words that best describe how **much** fear you have.

NONE 1 — SOME 2 — A LOT 3 — 4 — 5

41. Being hit by a car or truck	①	②	③	④	⑤
42. Having to go to school	①	②	③	④	⑤
43. Playing rough games during recess	①	②	③	④	⑤
44. Having your parents argue	①	②	③	④	⑤
45. Being in a dark room or a closet	①	②	③	④	⑤
46. Being in a play or program at school	①	②	③	④	⑤
47. Seeing ants or beetles	①	②	③	④	⑤
48. Being criticized by others	①	②	③	④	⑤
49. Seeing strange looking people	①	②	③	④	⑤
50. The sight of blood	①	②	③	④	⑤
51. Going to the doctor	①	②	③	④	⑤
52. Seeing strange or mean looking dogs	①	②	③	④	⑤
53. Cemeteries	①	②	③	④	⑤
54. Getting a report card	①	②	③	④	⑤
55. Getting a haircut	①	②	③	④	⑤
56. Being in deep water	①	②	③	④	⑤
57. Having nightmares	①	②	③	④	⑤
58. Falling from high places	①	②	③	④	⑤
59. Getting a shock from electricity	①	②	③	④	⑤
60. Going to bed in the dark	①	②	③	④	⑤
61. Getting car sick	①	②	③	④	⑤
62. Being alone	①	②	③	④	⑤
63. Wearing clothes different from others	①	②	③	④	⑤
64. Getting punished by your father	①	②	③	④	⑤
65. Having to stay after school	①	②	③	④	⑤
66. Making mistakes	①	②	③	④	⑤
67. Watching mystery movies	①	②	③	④	⑤
68. Hearing loud sirens	①	②	③	④	⑤
69. Doing something new	①	②	③	④	⑤
70. Getting a serious illness - germs	①	②	③	④	⑤
71. Being in closed spaces	①	②	③	④	⑤
72. Being in an earthquake	①	②	③	④	⑤
73. Nuclear war	①	②	③	④	⑤
74. Riding in an elevator	①	②	③	④	⑤
75. Being in dark places	①	②	③	④	⑤
76. Not being able to breathe	①	②	③	④	⑤
77. Getting stung by a bee	①	②	③	④	⑤
78. Seeing worms or snails	①	②	③	④	⑤
79. Seeing rats or mice	①	②	③	④	⑤
80. Taking a test	①	②	③	④	⑤

Appendix D: Fear Survey Schedule for Children-Revised Frequency Version

DO NOT WRITE IN THIS AREA

FREQUENCY

Directions:

A number of statements which boys and girls use to describe the fears they have are given below. Read each fear carefully and color the circle under the word or words that best describes how often you think about that fear. There are no right or wrong answers. Remember, find the word or words that best describe how often you think about that fear.

1 HARDLY EVER
2 SOMETIMES
3
4
5 A LOT OF THE TIME

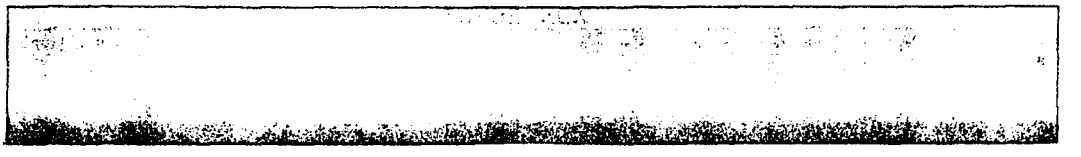
	1	2	3	4	5
1. Cemeteries	①	②	③	④	⑤
2. Being alone	①	②	③	④	⑤
3. Riding on a train	①	②	③	④	⑤
4. Getting lost in a strange place	①	②	③	④	⑤
5. Guns	①	②	③	④	⑤
6. Getting a report card	①	②	③	④	⑤
7. Going to bed in the dark	①	②	③	④	⑤
8. Having to go to school	①	②	③	④	⑤
9. Nuclear war	①	②	③	④	⑤
10. Getting a shot from the nurse/doctor	①	②	③	④	⑤
11. Hearing about death or dead people	①	②	③	④	⑤
12. Wearing clothes different from others	①	②	③	④	⑤
13. Being in an earthquake	①	②	③	④	⑤
14. Having to stay after school	①	②	③	④	⑤
15. Looking foolish	①	②	③	④	⑤
16. Being in dark places	①	②	③	④	⑤
17. Not being able to breathe	①	②	③	④	⑤
18. A burglar breaking into your house	①	②	③	④	⑤
19. Having to go to the hospital	①	②	③	④	⑤
20. Getting a shock from electricity	①	②	③	④	⑤
21. Being in a dark room or a closet	①	②	③	④	⑤
22. Riding in an elevator	①	②	③	④	⑤
23. Seeing strange looking people	①	②	③	④	⑤
24. Riding in the car or bus	①	②	③	④	⑤
25. Making mistakes	①	②	③	④	⑤
26. Failing a test	①	②	③	④	⑤
27. Taking a test	①	②	③	④	⑤
28. Being criticized by others	①	②	③	④	⑤
29. Sharp objects	①	②	③	④	⑤
30. Being in a big crowd	①	②	③	④	⑤
31. Being in closed spaces	①	②	③	④	⑤
32. Playing rough games during recess	①	②	③	④	⑤
33. Fire - getting burned	①	②	③	④	⑤
34. Getting sick at school	①	②	③	④	⑤
35. Being sent to the principal	①	②	③	④	⑤
36. Hearing loud sirens	①	②	③	④	⑤
37. Giving an oral report	①	②	③	④	⑤
38. Falling from high places	①	②	③	④	⑤
39. Getting a serious illness - germs	①	②	③	④	⑤
40. Cats	①	②	③	④	⑤

FREQUENCY

Remember, find the word or words that best describe how <u>often</u> you think about that fear.

A LOT OF THE TIME 3
SOMETIMES 2
HARDLY EVER 1
4
5

41. Talking on the telephone	①	②	③	④	⑤
42. Getting punished by your mother	①	②	③	④	⑤
43. The sight of blood	①	②	③	④	⑤
44. Getting bad grades	①	②	③	④	⑤
45. Getting a haircut	①	②	③	④	⑤
46. Seeing strange or mean looking dogs	①	②	③	④	⑤
47. Your parents criticizing you	①	②	③	④	⑤
48. Having your parents argue	①	②	③	④	⑤
49. Seeing ants or beetles	①	②	③	④	⑤
50. Seeing worms or snails	①	②	③	④	⑤
51. Getting stung by a bee	①	②	③	④	⑤
52. Riding a roller coaster	①	②	③	④	⑤
53. Ghosts or spooky things	①	②	③	④	⑤
54. Doing something new	①	②	③	④	⑤
55. Thunderstorms	①	②	③	④	⑤
56. Seeing some lizards	①	②	③	④	⑤
57. Seeing rats or mice	①	②	③	④	⑤
58. Getting a cut or an injury	①	②	③	④	⑤
59. Being in a play or program at school	①	②	③	④	⑤
60. Going to the doctor	①	②	③	④	⑤
61. Meeting someone for the first time	①	②	③	④	⑤
62. Being invaded or in a bombing attack	①	②	③	④	⑤
63. Having to eat food you don't like	①	②	③	④	⑤
64. Watching mystery movies	①	②	③	④	⑤
65. Going to the dentist	①	②	③	④	⑤
66. Getting punished by your father	①	②	③	④	⑤
67. Being in deep water	①	②	③	④	⑤
68. Being left at home with a sitter	①	②	③	④	⑤
69. Having nightmares	①	②	③	④	⑤
70. Seeing bats or birds	①	②	③	④	⑤
71. Seeing some snakes	①	②	③	④	⑤
72. Seeing a spider	①	②	③	④	⑤
73. Flying in a plane	①	②	③	④	⑤
74. Being teased	①	②	③	④	⑤
75. Being on high places, like a mountain	①	②	③	④	⑤
76. Bears or wolves	①	②	③	④	⑤
77. Being called on by the teacher	①	②	③	④	⑤
78. Getting car sick	①	②	③	④	⑤
79. Being in a fight	①	②	③	④	⑤
80. Being hit by a car or truck	①	②	③	④	⑤



Appendix E: Student Data Sheet

Guide to Student Data Sheet

Student: Please put initials or some other identifying mark next to the ID number.

Age: If the child will age up in the month they are taking the survey, please put the higher age.

Race: AA = African-American
C = Caucasian
O = All other races

Lunch: A = Free lunch as defined by Federal Guidelines
B = Reduced lunch as defined by Federal Guidelines
N = Child does not receive free or reduced lunch

Fear Survey Schedule for Children
Student Data Sheet

Teacher ID_____ **School ID**____ **Grade**___

Number of students: African-American______; Caucasian______;
Other____
Boys____; Girls____

Class List (ID #)	Sex (M/F)	Age (8-11)	Race (AA/C/O)	Lunch (A/B/N)

Appendix F: Manual for Administering Adapted Intensity and Frequency Versions of the Fear Survey Schedule for Children - Revised

Procedural Manual for Administering Adapted Versions of the Fear Survey Schedule for Children-Revised: Intensity and Frequency

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About the Original Instrument

The Fear Survey Schedule for Children - Revised (FSSC-R) (Ollendick, 1983) was adapted from Scherer and Nakamura's (1968) original Fear Survey Schedule for Children (FSS-FC) which was based on Wolpe and Lang's (1964) and Geer's (1965) adult fear survey schedules and from consulting with professionals familiar with children's fears (Scherer & Nakamura, 1968). The FSSC-R is a self-report inventory designed to appraise fears in children. It has 80 items that depict a broad range of particular objects and circumstances that children may find fear-producing (Miller, Barrett, & Hampe, 1974). Children rate these objects and circumstances as to the degree of fear each item produces.

Differences in Geographical Location

Children in various parts of the United States, Australia, and Great Britain have been involved in studies utilizing the FSSC-R (King, Gullone, & Ollendick, 1992; Ollendick, Matson, & Helsel, 1985). Ollendick, King, & Frary, (1989) determined that no significant differences in scores exist between the participants within the various geographical locations.

Reliability

The FSSC-R has been shown to have high internal consistency (Ollendick, 1983), moderate test-retest reliability (Ollendick, 1983), and moderate stability of scores over time (Ollendick, 1983; Ollendick, 1988). Using two samples of children, Ollendick (1983) obtained high internal consistency (coefficient alpha) ranging from .93 for boys and from .945 for girls. Test-retest reliability over one week was high, with .81 for boys and .89 for girls. Over a three-month interval, test-retest reliability showed only moderate results, with .62 for boys and .58 for girls (Ollendick, 1983).

Validity

Ollendick (1983) found that the validity of the FSSC-R has been supported through comparison with the Trait Scale of the State-Trait Anxiety Inventory for Children (Spielberger, 1970), the Piers-Harris Children's Self-Concept Scale (Piers & Harris, 1969), and the Nowicki-Strickland Locus of Control Scale (Nowicki & Strickland, 1973). The FSSC-R has been shown to positively relate to trait anxiety ($r = .46$) and to negatively relate to both self-concept ($r = -.69$) and internal locus of control ($r = -.60$).

Ollendick and Meyer (1984) found significant differences between school phobic girls (M = 175; SD = 41) and school phobic boys (M = 145; SD = 29) and their matched controls, nonschool phobic girls (M = 145; SD = 39) and nonschool phobic boys (M = 125; SD = 24). This finding supports the validity of the FSSC-R in differentiating between clinical and nonclinical groups. King, Gullone, and Ollendick (1990), Last, Francis, and Strauss (1989), and King, Ollendick, Gullone, Cummins, and Josephs (1990) also found the FSSC-R to discriminate between clinical and normal populations.

Factor Analysis

Factor-analytic studies (Ollendick, 1983; Ollendick, King, & Frary, 1989) consistently yielded five factors which accounted for 77% of the variance: fear of failure and criticism, fear of the unknown, fear of injury and small animals, fear of danger and death, and medical fears.

- **Fear of failure and criticism** included 23 items related to social-evaluative situations such as failing a test, being called on by the teacher, being sent to the principal, or being criticized by others.

- **Fear of the unknown** included 20 items related to unfamiliar circumstances or unpredictable consequences such as thunderstorms, being in a big crowd, or loud sirens.

- **Fear of injury and small animals** included 18 items related to harmful objects (e.g., guns or involvement in a fight) or small animals such as spiders, rats, or mice.

- **Fear of danger and death** included 12 items related to danger or death such as nuclear war, being hit by a car, or not being able to breathe.

- **Medical fears** included 7 items related to medical issues (e.g., having to go to the hospital or getting a shot from the nurse/doctor) or going to the dentist (Ollendick, 1988).

Instrument Modification

Two modified versions of the FSSC-R were created for the purpose of determining the combined impact of both intensity and frequency.

Intensity Version

The adapted intensity version is very similar to the original FSSC-R because it also measures the intensity of children's specific fears.

Items

The order and substance of the questions was not altered, although the wording of 27 items was changed to allow consistency with the rest of the items (Friedman, 1992). Changes were minor (i.e., "Elevators" was changed to "Riding in an elevator") except one significant change, "Russia" to "Nuclear war" (Gullone & King, 1992; Gullone & King, 1993; King, Ollier, Iacuone, Schuster, Bays, Gullone, & Ollendick, 1989; Spence & McCathie, 1993), which was made to more closely resemble current conditions.

Children respond to each item according to the word or phrase that best describes how much of a specific fear they believe they have. Respondents assign a score of 1 = None, 2 = Some, and 3 = A lot, for each item. Scores are then summed across items to produce a Fear Intensity Score.

Frequency Version

In order to give more meaning to each child's choices, the same items were randomly reordered (Kerlinger, 1986) for an adapted frequency version of the FSSC-R. With this adaptation the frequency rather than the intensity of each fear is established. Children respond to each item according to the word or phrase that best describes how often they think about a specific fear. Respondents assign a score of 1 = Hardly ever, 2 = Sometimes, and 3 = A lot of the time, for each item. Scores are then summed across items to produce a Fear Frequency Score.

The items for both modified instruments were transferred to Opscan sheets for ease of scoring. A correlation of .95 was obtained during a pilot study conducted to determine the similarity between the original FSSC-R and the adapted intensity version.

Survey Instructions

Both surveys include instructions that can be easily understood by children between the ages of 8 and 12 (Ollendick, 1983). Respondents are assured that there

are no right or wrong answers. They are asked to respond to each of the 80 items by marking the amount of fear (i.e., none, some, or a lot) they have related to a specific object or situation. The frequency survey instructions are identical to those of the intensity survey except respondents are directed to indicate how often they experience a specific fear (i.e., hardly ever, sometimes, a lot of the time).

Scoring the FSSC-R

King, Ollier, Iacuone, Schuster, Bays, Gullone, & Ollendick (1989) described the Fear Score as a global index of a respondent's level of fear. This concept can be demonstrated by obtaining scores by summing the responses to each of the items. Higher scores signify greater levels of fears (Friedman, 1992).

On the Intensity instrument, scale scores reveal the prevalence of specific categories of fears, whereas the Fear Intensity Score indicates the intensity of fears. An intensity score can range from 80 (no intensity) to 240 (extremely high intensity) (Silverman & Nelles, 1988).

On the Frequency instrument, scale scores will reveal the incidence of specific categories of fears, whereas the Fear Frequency Score indicates the frequency of fears. A frequency score can range from 80 (no frequency) to 240 (extremely high frequency).

By combining fear intensity and fear frequency through multiplicative weighting an individual's Total Fear score would indicate both the degree and frequency of their fears. Scores could range from 80 (little or no fear at any time) to 720 (a high degree of fear all of the time).

General Instructions for Administering Both Adapted Versions of the FSSC-R

★ Text in bold italics indicates exact wording to be used.

★ Please allow 60 to 75 minutes to administer both of these instruments.

★ Either instrument may be administered first.

Materials: 2 (#2) pencils
for each subject:
- 1 Intensity Version FSSC-R Cover sheet/Sample Item
- 1 Frequency Version FSSC-R Cover sheet/Sample Item
- 1 Intensity Version FSSC-R
- 1 Frequency Version FSSC-R

Instructions: All students should have 2 (#2) pencils on their desk, along with the practice cover sheet and instrument that matches the instrument you are reading.

Introduction

(To be presented at the beginning of the session).

Administrator: ***Today you are going to be taking two fear surveys.***

ADM ***One survey deals with how <u>much</u> fear you have regarding certain things and the other survey deals with how <u>often</u> you think about your fear of those things. There are no right or wrong answers. Your answer might be different from your neighbor because each of you have different feelings.***

★ **(If you are administering the Intensity Version first, turn to the next page now).**

★ **(If you are administering the Frequency Version first, turn to page 12 now).**

Administering the Adapted Intensity Version of the FSSC-R

Instructions: Make sure all students have a cover sheet with the sample item, two #2 pencils, and a Fear Survey that has the word "Intensity" at the top. Read the text in bold italics and follow suggestions in parentheses. Clarifications are to be read even if you feel the students understand the term(s).

ADM: (Hold up an example of the cover sheet). ***Look at your cover sheet. It looks very much like the survey we are going to fill out in just a moment. Put your finger on the word "Directions." Read the directions to yourself while I read them out loud.***

Then say, ***"A number of statements which boys and girls use to describe the fears they have are given below. Read each fear and color the circle under the word or words that best describe your fear. There are no right or wrong answers. Remember, find the word or words that best describe how much fear you have."***

★ (Make sure that all students are following along).

ADM: ***Look at the word under the directions. "Sharks" is the example. How much fear do you have when you think about sharks? If you have no fear of sharks, then you would mark under the word "None" on the right hand side of the page inside the circle with a "1" in it. If you have some fear of sharks, then you would mark under the word "Some" on the right side of the page, inside the circle with a "2" in it. If you have a lot of fear when you think about sharks, then you would mark under the words "A lot" on the right side of the page, inside the circle with a "3" in it. Mark your papers now.***

Raise your hand if you marked "None" for how much fear you have regarding sharks. Raise your hand if you marked "Some" for how much fear you have regarding sharks. Raise your hand if you marked "A lot" for how much fear you have regarding sharks.

★ **(Look for responses--walk around the room to see that students have marked correctly).**

ADM: ***This is the only time we are going to be sharing our answers. Are there any questions?***

★ (Make sure that all students understand what they are supposed to do.)

ADM: ***Turn your cover sheet over to the back. Use this to help you keep your place while you are filling out the survey.***

There are 40 items on the front and 40 items on the back of this survey. We are going to go through the survey together -- you will read the items silently while I read them aloud. After each item, be sure to mark the word or words which best describe how much fear you have when you think about that item. Make your mark dark and be sure to fill in the circle completely. If you decide to change your answer, erase the answer completely and then make a new mark. Never mark two answers for one item. If you get stuck on one, just skip it and come back to it later. Try not to leave any items unanswered.

Are there any questions?

★ (Make sure that all students understand what they are supposed to do.)

ADM: ***Let's begin. Remember, find the word or words that best describe how much fear you have.***

(Read all items aloud as the children follow along and read silently).

Number 1: Giving an oral report.
Clarification: "'Oral' means out loud."

Number 2: Riding in the car or bus.

Number 3: Getting punished by your mother.

Number 4: Seeing some lizards

Number 5: Looking foolish

Number 6: Ghosts or spooky things

Number 7: Sharp objects

Number 8: Having to go to the hospital

Number 9: Hearing about death or dead people

Number 10: Getting lost in a strange place

Number 11: Seeing some snakes

Number 12: Talking on the telephone

Number 13: Riding a roller coaster

Number 14: Getting sick at school

Number 15: Being sent to the principal

Number 16: Riding on a train

Number 17: Being left at home with a sitter
Clarification: "'Sitter' means baby sitter."

Number 18: Bears or wolves

Number 19: Meeting someone for the first time

Number 20: Being invaded or in a bombing attack
Clarification: "When one country takes over another country."

Number 21: Getting a shot from the nurse/doctor

Number 22: Going to the dentist

Number 23: Being on high places, like a mountain

Number 24: Being teased

Number 25: Seeing a spider

Number 26: A burglar breaking into your house

Number 27: Flying in a plane

Number 28: Being called on by the teacher

Number 29: Getting bad grades

Number 30: Seeing bats or birds

Number 31: Your parents criticizing you
Clarification: "'Criticizing' means telling you that you're not very good at something."

Number 32: Guns

Number 33: Being in a fight

Number 34: Fire--getting burned

Number 35: Getting a cut or an injury

Number 36: Being in a big crowd

Number 37: Thunderstorms

Number 38: Having to eat food you don't like

Number 39: Cats

Number 40: Failing a test

ADM: **(Have students turn their papers over. Remind students that they are to mark how much fear they have.)**

Number 41: Being hit by a car or truck

Number 42: Having to go to school

Number 43: Playing rough games during recess
Clarification: "'Recess' means playtime or P.E."

Number 44: Having your parents argue
Clarification: "'Argue' means disagree with each other."

Number 45: Being in a dark room or closet

Number 46: Being in a play or program at school

Number 47: Seeing ants or beetles

Number 48: Being criticized by others
Clarification: "'Criticized' means telling you that you're not very good at something."

Number 49: Seeing strange looking people

Number 50: The sight of blood

Number 51: Going to the doctor

Number 52: Seeing strange or mean looking dogs

Number 53: Cemeteries
Clarification: "'Cemeteries' are where dead people are buried."

Number 54: Getting a report card

Number 55: Getting a haircut

Number 56: Being in deep water

Number 57: Having nightmares

Number 58: Falling from high places

Number 59: Getting a shock from electricity

Number 60: Going to bed in the dark

Number 61: Getting car sick

Number 62: Being alone

Number 63: Wearing clothes different from others

Number 64: Getting punished by your father

Number 65: Having to stay after school

Number 66: Making mistakes

Number 67: Watching mystery movies
Clarification: "'Mystery movies' are movies that might be a little scary because you're not sure what might happen next."

Number 68: Hearing loud sirens
Clarification: "Like a police car, an ambulance, or a fire truck."

Number 69: Doing something new
Clarification: "Something you have never done before."

Number 70: Getting a serious illness--germs
Clarification: "Being very, very sick."

Number 71: Being in closed spaces
Clarification: "'Closed spaces' are like a closet or very small room."

Number 72: Being in an earthquake

Number 73: Nuclear war
Clarification: "The biggest war there could be."

Number 74: Riding in an elevator

Number 75: Being in dark places

Number 76: Not being able to breathe

Number 77: Getting stung by a bee

Number 78: Seeing worms or snails

Number 79: Seeing rats or mice

Number 80: Taking a test

★ Be sure to remind the children to check over their sheets and fill in any items they might have missed.

★ Ask them to erase all stray marks.

★ Collect Intensity Surveys and discard cover sheets.

Administering the Adapted Frequency Version of the FSSC-R

Instructions: **Make sure all students have a cover sheet with the sample item, two #2 pencils, and a Fear Survey that has the word "Intensity" at the top. Read the text in bold italics and follow suggestions in parentheses. Clarifications are to be included even if you feel the students understand the term(s).**

ADM: ***Look at your cover sheet. It looks very much like the survey we are going to fill out in just a moment. Put your finger on the word "Directions." Read the directions to yourself while I read them out loud.***

Then say, ***"A number of statements which boys and girls use to describe the fears they have are given below. Read each fear and color the circle under the word or words that best describe how often you think about that fear. There are no right or wrong answers. Remember, find the word or words that best describe how often you think about that fear."***

★ **(Make sure that all students are following along).**

ADM: ***Look at the word under the directions. "Sharks" is the example. How often do you think about your fear of sharks? If you rarely or never have a fear of sharks, then you would mark under the words "Hardly ever" on the right hand side of the page inside the circle with a "1" in it. If you sometimes think about your fear of sharks, then you would mark under the word "Sometimes" on the right side of the page, inside the circle with a "2" in it. If you think about your fear of sharks a lot, then you would mark under the words "A lot of the time" on the right side of the page, inside the circle with a "3" in it. Mark your papers now.***

Raise your hand if you marked "Hardly ever" for how often you think about your fear of sharks. Raise your hand if you marked "Sometimes" for how often you think about your fear of sharks. Raise your hand if you marked "A lot of the time" for how often you think about your fear of sharks.

★ **(Look for responses--walk around the room to see that students have marked**

correctly. This concept may be more difficult for your students to understand. The following example may help.)

ADM: *Let's talk about an example. There was a boy who lived near the ocean. He loved to go swimming and swam every day, but he was very afraid of sharks. What do you think he would mark?* **(Pause--wait for a verbal response that would indicate an understanding of the frequency aspect).** *That's right! He would probably mark "A lot of the time" since he goes swimming every day. Now, if this boy moved far away from the ocean, raise your hand if you think he would still mark "A lot of the time."* **(Wait for response.)** *Those of you that did not raise your hand are right! What do you think he might mark instead?* **(Accept either "Sometimes" or "Hardly ever").**

ADM: *This is the only time we are going to be sharing our answers. Are there any questions?*

★ **(Make sure that all students understand what they are supposed to do.)**

ADM: *Turn your cover sheet over to the back. Use this to help you keep your place while you are filling out the survey.*

There are 40 items on the front and 40 items on the back of this survey. We are going to go through the survey together -- you will read the items silently while I read them aloud. After each item, be sure to mark the word or words which best describe how much fear you have when you think about that item. Make your mark dark and be sure to fill in the circle completely. If you decide to change your answer, erase the answer completely and then make a new mark. Never mark two answers for one item. If you get stuck on one, just skip it and come back to it later. Try not to leave any items unanswered.

Are there any questions?

★ **(Make sure that all students understand what they are supposed to do.)**

ADM: *Let's begin. Remember, find the word or words that best describe how often you think about the fear you have.*

(Read all items aloud as the children follow along and read silently).

Number 1: Giving an oral report.
Clarification: "'Oral' means out loud."

Number 2: Riding in the car or bus.

Number 3: Getting punished by your mother.

Number 4: Seeing some lizards

Number 5: Looking foolish

Number 6: Ghosts or spooky things

Number 7: Sharp objects

Number 8: Having to go to the hospital

Number 9: Hearing about death or dead people

Number 10: Getting lost in a strange place

Number 11: Seeing some snakes

Number 12: Talking on the telephone

Number 13: Riding a roller coaster

Number 14: Getting sick at school

Number 15: Being sent to the principal

Number 16: Riding on a train

Number 17: Being left at home with a sitter
Clarification: "'Sitter' means baby sitter."

Number 18: Bears or wolves

Number 19: Meeting someone for the first time

Number 20: Being invaded or in a bombing attack
Clarification: "When one country takes over another country."

Number 21: Getting a shot from the nurse/doctor

Number 22: Going to the dentist

Number 23: Being on high places, like a mountain

Number 24: Being teased

Number 25: Seeing a spider

Number 26: A burglar breaking into your house

Number 27: Flying in a plane

Number 28: Being called on by the teacher

Number 29: Getting bad grades

Number 30: Seeing bats or birds

Number 31: Your parents criticizing you
Clarification: "'Criticizing' means telling you that you're not very good at something."

Number 32: Guns

Number 33: Being in a fight

Number 34: Fire--getting burned

Number 35: Getting a cut or an injury

Number 36: Being in a big crowd

Number 37: Thunderstorms

Number 38: Having to eat food you don't like

Number 39: Cats

Number 40: Failing a test

ADM: **(Have students turn their papers over. Remind students that they are to mark how <u>often</u> they think about their fear.)**

Number 41: Being hit by a car or truck

Number 42: Having to go to school

Number 43: Playing rough games during recess
Clarification: "'Recess' means playtime or P.E."

Number 44: Having your parents argue
Clarification: "'Argue' means disagree with each other."

Number 45: Being in a dark room or closet

Number 46: Being in a play or program at school

Number 47: Seeing ants or beetles

Number 48: Being criticized by others
Clarification: "'Criticized' means telling you that you're not very good at something."

Number 49: Seeing strange looking people

Number 50: The sight of blood

Number 51: Going to the doctor

Number 52: Seeing strange or mean looking dogs

Number 53: Cemeteries
Clarification: "'Cemeteries' are where dead people are buried."

Number 54: Getting a report card

Number 55: Getting a haircut

Number 56: Being in deep water

Number 57: Having nightmares

Number 58: Falling from high places

Number 59: Getting a shock from electricity

Number 60: Going to bed in the dark

Number 61: Getting car sick

Number 62: Being alone

Number 63: Wearing clothes different from others

Number 64: Getting punished by your father

Number 65: Having to stay after school

Number 66: Making mistakes

Number 67: Watching mystery movies
Clarification: "'Mystery movies' are movies that could be a little scary because you're not sure what might happen next."

Number 68: Hearing loud sirens
Clarification: "Like a police car, an ambulance, or a fire truck."

Number 69: Doing something new
Clarification: "Something you have never done before."

Number 70: Getting a serious illness--germs
Clarification: "Being very, very sick."

Number 71: Being in closed spaces
Clarification: "'Closed spaces' are like a closet or very small room."

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