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Cognitive and emotional variables in childhood anxiety

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COGNITIVE AND EMOTIONAL VARIABLES IN CHILDHOOD ANXIETY

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Cognitive and Emotional Variables in Childhood Anxiety

Abstract

Research was conducted on 60 subjects from mental health agencies in order to determine that childhood anxiety and depression can be differentiated. The 60 subjects were given the CDI and the RCMAS self-report measures in order to be placed in groups. This allowed the subjects to be divided into 4 groups: Anxious, Anxious/Depressed, Depressed and Not Anxious/Not Depressed. The 4 groups were then given 2 additional self-report measures, the STAIC and FSSC -R to measure whether Anxious and the Anxious/Depressed children exhibited more fears and anxious traits than did the Depressed and Not Anxious/Not Depressed children. Analyses of variance revealed that the Anxious and Anxious/Depressed subjects were significantly different from the Depressed and Not Anxious/Not Depressed subjects. Anxiety is closely related to the cognitive and emotional component of fear. The study was successful in demonstrating significant differences of cognitions and feelings experienced by depressed and anxious children.

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Cognitive and Emotional Variables of Childhood Anxiety

The word anxiety comes from the Latin word anxius, meaning a condition of agitation and distress. The term has been used since the 1500's (Bourne, 1990). Anxiety is a physiological, behavioral and psychological reaction all at once.

On the physiological level, anxiety may include bodily reactions such as rapid heartbeat, muscle tension or sweating. On a behavioral level, anxiety affects the ability to deal with certain everyday situations while on the psychological level, anxiety is a subjective state of apprehension and uneasiness (Bourne, 1990).

Anxiety is a normal emotion that people experience about events they cannot control or predict or about events that seem threatening or dangerous. Many times people use the words fear or anxiety to describe the same feeling, but fear is usually more specific than anxiety. When anxiety becomes severe, an anxiety disorder may develop. Fears and anxieties in children are a common part of normal growth, but they are a serious concern when the severity or duration impinges negatively on the routine developmental challenges of childhood (Kendall, Chansky, Kane, Kim, Kortlander, Ronan, Siqueland, and Sessa, 1992). Normative fear has been defined as a normal reaction to a threat, be it perceived or actual (Gullone and King, 1993; Bryne, 2000; Lane and Gullone, 1999). Although a variety of procedures have been used in the investigation of children's fears including observing children in their natural environments and interviewing the child's parents, normative fear research has predominantly incorporated the use of fear survey schedules (Lane and Gullone, 1999). Fear occurring as part of general development has been differentiated from clinical fear or phobia depending on whether or not the expressed fear is age or

stage specific and whether or not it persists over an extended period of time (Gullone and King, 1999).

The research literature investigating childhood anxiety is somewhat limited, but nevertheless provides evidence for behavioral, physiological and cognitive distress associated with symptoms of anxiety (Beidel, 1988; Bell-Dolan, 1995; Kendall, Chansky, et al., 1992; Strauss, Lease, Kazdin, Dulcan and Last, 1989). The Diagnostic and Statistical Manual for Mental Disorders- fourth edition includes symptoms relating to each of these aspects of anxiety. Researchers investigating the behavior of referred anxious children have found they demonstrate impaired peer relationships, social withdrawal, impaired social behavior and avoidance of feared stimuli (Chansky and Kendall, 1996; Puig-Antich, Lukens, Davies, Goetz, Brennan-Quattrock, and Todak, 1985; Strauss, Lahey, Frick, Frame, and Hynd, 1998;Strauss, Frame, and Forehand, 1987; Kendall et al., 1992). The DSM-IV appears to reflect these findings in its diagnoses of anxiety disorders, as the criteria include avoidance and impairment in social functioning as possible behavioral manifestations of these disorders (Callahan, Panichelli-Mindel and Kendall, 1996).

Separation anxiety disorder involves fears about the possible loss of or separation from a major attachment figure, generally the mother (APA, 1994). Generalized anxiety disorder involves a general tendency to worry excessively about a variety of situations or activities, such as school performance (APA, 1994). Social phobia is characterized by excessive fear in social or performance situations. Children diagnosed with social phobia must demonstrate anxiety when interacting with peers; their fear cannot be limited to interactions with adults (APA, 1994). Specific phobias are characterized by an excessive and persistent fear of a specific stimulus or

situation. The fear must interfere significantly with the person's normal routine (APA, 1994). Panic Disorder involves the experience of recurrent panic attacks characterized by extreme fear, including fear of dying and various physical symptoms (APA, 1994). Posttraumatic stress disorder occurs after a person has been exposed to a traumatic event in which there was severe danger to oneself or another and this event must have caused intense feelings of fear of helplessness (APA, 1994).

The concept of childhood anxiety has been of widespread interest in current research. Because anxiety disorders in childhood and adolescence are more prevalent than any other childhood disorder, the importance of identifying and attending to childhood anxiety is becoming increasingly clear. However, the understanding of the experience and expression of that anxiety is less clear (Bell, 1994).

Anxiety as a disorder of childhood has been known to the psychiatric community since the 19th century, yet there continues to be a lack of systematic epidemiological study of its characteristics (Benjamin, 1990). Also, research has been slow to focus on the cognitive dimensions. The specific actions of cognitions either descriptively or prescriptively have yet to receive sufficient attention (Kendall and Chansky, 1991).

Many of the defining features of child anxiety involve cognitive behaviors such as worrying about possible harm befalling major attachment figures, worrying about future events, concern about past behavior and concern about competence (American Psychiatric Association, 1987). Lapouse and Monk (1959) found that fears and worries were a relatively common feature of childhood and not necessarily disabling, supporting views that children's fears were transient and would eventually disappear with developmental changes. On the other hand, several studies have noted

fears and shyness, a form of early social anxiety, are relatively stable phenomena in childhood disorders.

Several studies have found that children with emotional disorders were found to experience a similar disturbance later in life; thus, the fears and anxieties in early childhood are not necessarily innocuous events (Benjamin, 1990). More recent epidemiological studies have found that anxiety disorders in childhood and adolescence tend to be more prevalent than any other childhood disorder (Bell-Dolan, 1994). Internalizing problems such as anxiety, isolation and self-consciousness are seen in 10-20% of school-aged children (Johnson, 1979). While low levels of anxiety enhance awareness and performance, high levels contribute to a variety of psychosocial problems among adolescents.

Ollendick, et al (1985) found that in children from around age six through adolescence, fears remain relatively constant, primarily those related to injury, natural events and social anxiety. The 10 most common fears were as follows: being hit by a car or truck, not being able to breathe, fire/getting burned, death or dead people, bombing attacks/being invaded, getting poor grades, having my parents argue, being sent to the principal, a burglar breaking into our house, and falling from a high place (Ollendick, 1983).

Campbell (1986) also found that childhood fears appear to follow a developmental course beginning with fears of loud noises during infancy, and of strangers. With cognitive development, children develop fears of monsters and other imagined phenomena. By late childhood and early adolescence, children's fears became more realistic by focusing on natural disasters, school achievement and peer acceptance. So, assessment of the presence of an anxiety disorder calls for a

consideration of the developmental appropriateness of the child's anxious or fearful behavior.

Craske (1997) found that fears are very common in children and in adolescents as part of normal development. She further found that persistent fears that interfere with functioning or cause significant distress become phobias and anxiety disorders. Craske (1997) additionally found that factors contributing to childhood anxiety include biological and genetic bases, which is possibly one manifestation of trait anxiety; early childhood experiences that contribute to childhood anxiety include lack of control, parental expectations of fearful or anxious children and modeling of fears and anxiety from parents and significant others.

Ollendick, Yule and Ollier (1991) posited that fears change throughout childhood as a result of cognitive development and abilities to recognize and understand dangers in different situations. They suggest that fears develop as the child is increasingly able to perceive potential dangers in different situations but has neither advanced to the point of understanding the situation fully nor is able to exercise control over the situation.

There appears to be an overlap between depression and anxiety symptoms. Researchers have derived differing views to explain the overlap. Psychodynamic clinicians and cognitive therapists contend that the differences between depression and anxiety far exceed and are superior to the existing overlap of symptoms. Those clinicians who focus on "construct validity" stress the similarities to be superior and suggest a general construct of "negative affectivity". Watson and Clark (1984) introduced the term "negative affectivity" to refer to the construct that incorporates symptoms of anxiety, depression and neuroticism, as assessed by self-report measures.

Another view stresses that the difference is paramount and further suggests these differences can be located in the relationship between cognition and affect. These clinicians contend that depression in children exists when a certain level of cognitive development is obtained and cognitive-affective links are formed. However, these cognitive-affective links are based on little research that supports their role in differentiating depression and anxiety. Nevertheless, some researchers have continued to suggest that depression and anxiety are two distinctively different psychological disorders. Brady and Kendall (1992) found that although there is a significant and meaningful relationship between anxiety and depression there are differences between anxious, depressed and dually-diagnosed children. Freud (1917) differentiated depression and anxiety by explaining the differences of the ego's involvement. Anxiety was the ego's reaction to danger. Depression was the ego's reaction to a loss. Bibring (1953) stated anxiety was a way of preparing the ego to fight for survival. Dorpat (1976) supported Bibring's theory and further stated that anxiety prepares an individual to cope.

Ingram and Kendall (1987) suggest that depressive and anxiety disorders differ on a number of aspects of information processing. Beck (1976) has long hypothesized that different psychological disorders are characterized by unique disturbances in cognition. Echoing Freud, he believes that the cognitions of depressed individuals should reflect a theme of loss while the cognitions of anxious individuals should reflect a theme of danger or threat. Laurent and Stark (1993) supports this theory in research with children.

Blumberg and Izard (1986) explored the development of emotions and stated the difference between anxiety and depression was due to the cognitions and primary

emotions each experience. The "key" emotion of anxiety in children was fear, while the "key" emotion of depression in children was anger.

Craske (1997) presented three hypotheses concerning fear and anxiety in children. The first of which is that biological and genetic transmitted temperament predisposes the child to develop fears and anxiety. The second concerns parenting behaviors involving either direct modeling and reinforcement of childhood fears, and/or specific patterns of attachment and autonomy that generate anxious thoughts and behaviors in youth. A third hypothesis emphasizes the interaction between parental behaviors and anxious temperaments in offspring.

Krohne and Hock (1991) have shown that high anxiety in a child is significantly related to frequent negative feedback and parental restriction. Barrett, Rapee et al.(1996) performed a study concerning the role of parents in children's responses. They found that parents of socially anxious children expected their children to use avoidance as a way of coping with socially threatening situations, and parents of children with specific phobias expected more avoidance in response to physically threatening situations. These results suggest that parental reactions contribute to the development and reinforcement of fear and anxiety (Barrett, Rapee, et. al., 1996). Ollendick and King (1991) found that the majority of children attributed the onset of their fears to modeling and informational processes.

Research on cognition in children diagnosed with anxiety has addressed self-talk, expectations and attributions (Ronan, Kendall and Rowe, 1994; Chansky and Kendall, 1996; Bell-Dolan and Last, 1990). In a variety of frightening situations, children diagnosed with anxiety disorders reported negative cognition and negative self-speech (Laurent and Stark, 1993). The internal dialogue of anxious children has been found to contain more negative self-statements and expectations than are found

in normal controls (Chansky and Kendall, 1996; Treadwell and Kendall, 1996). Bell-Dolan and Last (1990) reported that children diagnosed with an anxiety disorder attributed more internal, stable and global causes to negative outcomes than did normal controls.

Cognitions such as causal attributions, relevant vs. irrelevant thinking, alternative solutions thinking, perspective taking and social information processing have received almost no attention in the child anxiety literature (Bell, 1994). The study of cognitive components has lagged behind with behavioral components of anxiety receiving greater attention in past research. Attention has focused mainly on global measures of anxiety rather than on assessing the specific feelings.

Past research has focused primarily on cognitive variables of depression as evidenced by Kelso (1993) and Ryan (1996). Kelso (1993), conducted research that displayed a significant difference between depression and anxiety and which indicated that cognitive links created the difference. Kelso's1993 study consisted of three groups of female students whose age ranged from 10 - 12 years. The groups consisted of : (1) an "Anxious" group, (2) an "Anxious and Depressed" group and a (3) "Control" group. There were 20 subjects in each group.

The Children's Depression Inventory or CDI (Kovacs, 1981) and the Revised Children's Manifest Anxiety Scale or RCMAS (Reynolds and Richmond, 1985) were the measures of depression and anxiety administered to all subjects to determine into which group the subjects would be placed. Kelso (1993) also administered the Child Behavior Checklist (Achenbach, 1986) to parents and teachers of subjects to help assist with placement into groups. He established cutoff scores by determining the subjects who obtained a t-score of 63 or above on a self-report measure, and who also obtained a t-score of 63 or above on at least one of the two rating scales completed by

parents and teachers. The subjects in the "Control" group had t-scores of below 63 on all measures. After the subjects were placed in their respective groups, three different cognitive measures were administered across the three groups.

The Self-Perception Profile for Children or SPPC (Harter, 1985) measured the subjects' self concept in a variety of areas: athletic competence, scholastic competence, social acceptance, physical appearance and behavior. The Children's Attributional Style Questionnaire or CASQ (Seligman, 1984) measured the subjects' interpretation of current events. The Hopelessness Scale (Kazdin, French, Unis, Esveldt-Dawson and Sherick, 1984) measured the subjects' perception of the future.

Kelso's (1993) study was successful in showing significant differences between anxious and depressed females for two of the three variables of interest. The self-concept variable did not differ significantly between anxiety and depression. Both anxious and depressed groups expressed a negative sense of self and were more likely to blame misfortune on their own shortcomings. Kelso (1993) also found that depressed subjects in the study did identify their strengths and weaknesses objectively. The hope for the future was the cognitive variable which produced the greatest difference between the anxious and depressed subjects. Further, this study asserted that depressive individuals have specific cognitions that separate them from other disorders.

One problem with Kelso's (1993) study was the limited sample used and the uncertainty of the control group interpretive results. Also, Kelso's (1993) study was limited in the age range chosen for the subjects. Another problem Kelso encountered was his inability to find subjects who met the criteria for a "depression" only group.

Ryan (1996) furthered Kelso's (1993) research by adding a fourth group of subjects in her study. The group consisted of subjects who were anxious (A), both anxious and depressed (AD), depressed only (D), and a control (C) group who exhibited no overt symptoms of depression or anxiety. The subjects were both male and female ranging from ages 8 - 12. There were 15 subjects in each group. She also used the Children's Depression Inventory or CDI (Kovacs, 1981) and the Revised Children's Manifest Anxiety Scale or RCMAS (Reynolds and Richmond, 1985) as the self-report measures in determining placement into appropriate groups. T-scores of 63 and above on the self-report measures determined into which of the four groups subjects were placed.

Expanding on Kelso's (1993) study, Ryan's (1996) research provided that there were specific cognitive variables associated with childhood depression that differentiated from childhood anxiety. The depressed group and the depressed/anxious group displayed a more negative view of self, current events and future outlook than those individuals in the anxious group. By attempting to differentiate the specific cognitions of depression, Kelso (1993) and Ryan (1996) unknowingly detected specific variables of anxiety during the course of their research.

This study provided research findings of the specific components of childhood anxiety. Similar to Kelso (1993) and Ryan's (1996) studies, the cognitive and emotional variables of anxiety were more critically examined. There were significant differences among thoughts and feelings used to diagnose anxiety and depression disorders. The following hypotheses were examined.

H_1: "Anxious" children will have significantly more fears as indicated by the score in the Fear Survey Schedule for Children - Revised (FSSC - R) than the "depressed" or "not anxious/not depressed" children.

H_2: "Anxious and Depressed" children will have more fears as indicated by the score in the Fear Survey Schedule for Children - Revised (FSSC - R) than the "depressed" or "not anxious/not depressed" children.

H_3: "Anxious" children will have significantly more anxiety traits on The State-Trait Anxiety Inventory for Children (STAIC) - Trait score than the "depressed" children or "not anxious/not depressed" children.

H_4: "Anxious and Depressed" children will have more anxiety traits on The State-Trait Anxiety Inventory for Children (STAIC) - Trait score than the "depressed" children or "not anxious/not depressed" children.

Method

Subjects

The subjects consisted of four groups of male and female students, ages 8 -12 with 15 students in each group. The first group consisted of subjects who were anxious but not depressed (A), while the second group was comprised of both anxious and depressed (A/D) students. A third group consisted of subjects who were depressed (D) but not anxious. The fourth group included a control group of students who were having social and/or behavioral difficulties but no symptoms of anxiety or depression (NotA/NotD).

The subjects in the study were drawn randomly from a large pool of school age children who were referred for evaluations or counseling by school psychologists, teachers, parents and pediatricians because of emotional problems that had reached a point where further services were needed. The subjects were included into the study as they came into the clinic for scheduled appointments. The subjects were involved in outpatient treatment at local mental health agencies and determined to have a mild to moderate level of pathology. They were from lower income and working class families.

Apparatus

Children's Depression Inventory (CDI). The CDI (Kovacs, 1981) consists of 27 items designed to measure thoughts and feelings that relate to depression. The CDI has an internal consistency coefficient of .94; test-retest reliability at one week was 87, while the correlation at 6 weeks was .71. This is a widely used self-report measure.

Revised Children's Manifest Anxiety Scale (RCMAS). The RCMAS (Reynolds and Richmond, 1985) consists of 37 items which explore the level and nature of anxiety in children and adolescents. The RCMAS has an internal consistency of .85, a test-retest reliability of .98 after 3 weeks, and .68 after 9 months. A total anxiety score and four subscale scores may be obtained by this self-report. The four subscales are: Physiological Anxiety, Worry/Oversensitivity, Social Concerns and a Lie Scale.

The State-Trait Anxiety Inventory for Children (STAIC). The STAIC (Speilberger, 1973) includes two 20 item self-report scales that measure both enduring tendencies to experience anxiety (A-Trait) and temporal and situational variations in levels of perceived anxiety (A-State) (Speilberger, 1973). Children are asked to decide whether statements are hardly ever, sometimes or often true. Higher scores indicate increased anxiety proneness. Test-retest reliability, internal consistency and construct validity data are available.

Fear Survey Schedule for Children- Revised (FSSC - R). The FSSC - R (Ollendick, 1978) is an 80-item self report measure that assesses specific fears in children. The response format is a 3-point scale of none, some and a lot in situations that children may find anxiety producing. It has an internal consistency of .94, and a test-retest reliability of .82 after 1 week. Factors measured include: fear of failure and criticism, fear of the unknown, fear of injury and small animals, fear of danger and medical fears.

Procedures

The CDI and RCMAS were administered in order to assign the subjects to groups for the study. The subjects had to obtain a T-score of 63 or higher on the CDI and a T-score below a 63 on the RCMAS in order to be placed in the "Depressed"

group. The "Anxious" group had to obtain a T-score below 63 on the CDI and a T-score of 63 or higher on the RCMAS. The "Depressed/Anxious" group had to obtain a T-score of 63 or higher on the CDI and the RCMAS. The "Not Anxious/ Not Depressed" group had to obtain a T-score below 63 on both the CDI and the RCMAS. Utilizing the T-score of 63 was adapted from Kelso (1993). Kelso (1993) conducted a "multiple gate procedure" in which the subject had to obtain a score above the cutoff point on one self-report measure, CDI, and below the cutoff point on the second measure, RCMAS.

This study demonstrated that a significant difference was obtained on the "qualifying" measures (CDI and RCMAS) which entitled the subjects to be placed in their respective groups. The mean scores on the CDI showed the "Depressed" group and the "Anxious and Depressed" group scored higher on the CDI than did the "Anxious" and the "Not Anxious/Not Depressed" groups. The mean scores on the RCMAS showed the "Anxious" group and the "Anxious and Depressed" group scored higher on the RCMAS than did the "Depressed" and the "Not Anxious/Not Depressed" groups.

The subjects were tested in two sessions, each lasting approximately 45-50 minutes. The CDI and the RCMAS were administered on the first appointment to place the subjects into groups. The STAIC and FSSC - R were administered to all subjects on the second appointment. The subjects were tested as they were scheduled for individual counseling sessions at the mental health facilities. An explanation of the study was given to both the subjects and their parents. Parental consent was also obtained at the time of testing.

Results

An analysis of variance procedure among the 4 groups, "Anxious", "Depressed", "Anxious/Depressed", and "Not Anxious/Not Depressed", showed significant differences of all the groups, $F(3, 259) = 26.19$, $p < .01$. Duncan's Multiple Range Test revealed that the "Anxious" group had the overall highest mean score, while the "Not Anxious/Not Depressed" had the lowest mean score.

The means and standard deviations of the subject's total scores on the FSSC - R are listed in Table 1. There were significant differences revealed by the "Anxious" and the "Anxious/Depressed" and the "Depressed" and "Not Anxious/Not Depressed" groups. The "Anxious" group scored higher on the measure than did the "Depressed" and "Not Anxious/Not Depressed" groups, which supports H_1. The "Anxious/Depressed" group scored higher on the measure than did the "Depressed" and "Not Anxious/Not Depressed" groups, which supports H_2.

The means and standard deviations of the subject's total scores on the STAIC (trait) scores are also shown in Table 1. Significant differences were revealed by the "Anxious" and "Anxious/Depressed" groups and the "Depressed" and "Not Anxious/Not Depressed" groups. The "Anxious" group scored higher on the measure than did the "Depressed" and "Not Anxious/Not Depressed" groups, which further supports H_3. The "Anxious/Depressed" group scored higher on the measure than did the "Depressed" and "Not Anxious/Not Depressed" groups, which further supports H_4.

Table 1

Mean and Standard Deviation for Qualifying Measures Across Groups

	Anxious		Depressed		Anxious/Depressed		Not Anxious/Not Depressed	
Measure	M	SD	M	SD	M	SD	M	SD
CDI	51.87	7.54	73.33	8.72	70.93	4.46	51.2	5.83
RCMAS	64.53	1.45	46.87	7.41	65.27	1.57	44.67	6.26
FSSC-R	136.67	12.65	106.8	6.03	131.8	8.27	98.87	5.37
STAIC -t	63.47	5.14	46.4	7.57	62.6	5.94	51.8	4.65

Discussion

This study was successful in demonstrating significant differences of cognitions and feelings experienced by depressed and anxious children. More specifically, 1) "Anxious" children did have significant more fears on the FSSC-R than did the "Depressed" or "Not Anxious/Not Depressed" (control) children, 2) the "Anxious and Depressed" children indicated more fears than the "Depressed" or "Not Anxious/Not Depressed" (control) children. 3) The "Anxious" children had more anxiety traits on the STAIC - trait score than the "depressed" or "Not Anxious/ Not Depressed" (control) children and 4) the "Anxious and Depressed" children had more anxiety traits on the STAIC - trait score than did the "Depressed" or "Not Anxious/Not Depressed" (control) children. This evidence supports the results of Kelso's (1993) study and Ryan's (1996) study that cognitive variables of anxiety and depression are different and should be examined differently when considering a diagnosis of an anxiety or depressive disorder. Ryan (1996) stated it is essential to maintain a diagnostic distinction between childhood depression and anxiety.

Further testing of the subscales on the FSSC - R revealed that the study was successful in showing that "Anxious" children displayed more specific fears as well as fears of the unknown. The FSSC - R is broken down into 6 subscales: fear of failure and criticism, fear of the unknown, fear of injury and small animals, fear of danger and death, medical fears and other (miscellaneous) fears. An analysis of variance was conducted on the subscales of the FSSC-R. Duncan's Multiple Range Test revealed significant differences on all 6 subscales at the .01 level of significance. On the "fear of failure and criticism" subscale The "Not Anxious/Not Depressed" group was significantly different from the "Anxious", "Anxious/Depressed" and "Depressed"

groups. There was no significant difference among the "Anxious", "Depressed" and "Anxious/Depressed" groups. The Duncan Multiple Range test showed significant differences on the "fear of unknown" subscale. There is significant differences between the "Anxious" and "Anxious/Depressed" groups. There is significant differences between the "Anxious/Depressed" and the "Not Anxious/Not Depressed" groups. There are no significant differences between the "Depressed" and "Not Anxious/Not Depressed" groups. The Duncan Multiple Range test was performed on the following 4 subscales: Fear of Minor Injury and Small Animals, Fear of Danger and Death, Medical Fears and Other. Results showed the same significant differences on each of the 4 subscales. There was significant difference on the "Anxious" and "Anxious/Depressed" groups and the "Depressed" and "Not Anxious/Not Depressed" groups of the 4 subscales. There are no significant differences among the "Anxious" and "Anxious/Depressed" groups and among the "Depressed" and "Not Anxious/ Not Depressed groups.

This study reveals the specific fears that children exhibit. The "Depressed" group of children scored significantly lower on each of the subscales than did the "Anxious and "Anxious and Depressed" children with the exceptions of the fear of failure and criticism subscale. The "Depressed", "Anxious" and "Anxious and Depressed" groups of children all endorsed a significant number of items on the criticism and failure subscale. One reason the "Depressed" group may have endorsed the items seems to be because the specific items (getting poor grades, getting punished by mother or father, being teased and failing a test) deal with issues that could intensify feelings of hopelessness and poor outlook of the future. However, the "Depressed" children score lower on the other 5 subscales of the FSSC - R. The data from the subscale: fear of the unknown indicates that "Anxious" children are more

fearful of the dark, thunderstorms, elevators, closed spaces, going to bed in the dark and being alone. Other fears endorsed by "Anxious" and "Anxious and Depressed" children include fear of mean-looking dogs, a burglar breaking into the home, death and dead people, getting lost in a strange place and going to the doctor.

This study did reveal that the "Anxious and Depressed" group of children made more internal attributions than the control group, but not attributions which were more global or stable. This further supports previous research (Ryan, 1996 and Kelso, 1993).

Overall, the study demonstrated the relationship between fear and anxiety in children. Data suggest that there is a moderate relationship between self-report measures of fear and anxiety in unselected children and adolescents. Scherer and Nakamura (1968) reported a significant correlation between fear and anxiety. Children were divided into high-, moderate-, and low- anxiety groups on the basis of their scores from a self-report measure of anxiety. The results showed greater fear reactivity on the part of the high-anxiety group. Scherer and Nakamura (1968) found that the number and intensity of fears correlated positively with a measure of general anxiety. Fears and anxiety that persist and impair functioning develop into anxiety disorders. More recently, Ollendick, Yule and Ollier (1991) reported a significant correlation between the FSSC-R and the RCMAS scores.

Ollendick, et al.(1991) suggest that fears develop as the child is increasingly able to perceive potential dangers in different situations but is unable to exercise control over the situation. Ollendick, et al. (1991) stated that highly fearful children tended to be overly anxious. Therefore, a predisposition toward "anxiousness" may promote continued fears and development of phobias.

Currently, there are few studies that have assessed cognitions in anxious children. Cognitive models of adult psychopathology suggest that negatively valenced thoughts -- exaggerated perception of danger, threat and fear -- affect levels of anxiety (Beck and Emery, 1985). Kendall and Ingram(1989) found in anxiety, cognitions are associated with themes of perceived physical or emotional threat to one's personal domain. Ambrose and Rholes (1993) used the CDI and the STAIC -Trait scale and found that fear and threat cognitions have a stronger relation to anxiety in a nonclinical sample of children and adolescents.

Byrne (2000) completed a study investigating the relationships between anxiety, fear, self-esteem and coping strategies. The results indicated that girls had low levels of self-esteem and that boys demonstrated a significant decrease in both anxiety and fear by age 12. The data further suggested that there is a close link between anxiety and fear and that both are affected by similar factors (Byrne, 2000). Consistent with other studies (Gullone and King, 1993; Ollendick, Matson and Helsel, 1985; Ollendick, Yule and Ollier, 1991), Byrne (2000) found that girls had higher levels of fear than did the boys in years 9 and 12. Also, Byrne (2000) found that by age 12, boys and girls are using different coping mechanisms to manage their fear and anxiety.

King, Ollendick and Gullone (1992), showed that high-anxiety children indicated a greater fear of items related to failure and criticism than did lower-anxiety children. King, et al. (1990) believed that fear is influenced by psychological states, particularly anxiety. It is believed that more anxious individuals are also more fearful. Whereas fear is an immediate response to a threatening situation, anxiety is viewed as a more pervasive emotional experience (Johnson, 1979).

It is plausible that anxious children might learn to expect negative consequences for their behavior and as a result become fearful and avoidant. Anxious children appear to be more prone to interpret ambiguous situations in a threatening manner than nonclinic children (Barrett, et al., 1994). Children's fears and worries have consistently identified social concerns as an important area of anxiety that emerges during elementary school years through adolescence (Lapouse and Monk, 1959).

A possible limitation of this study is that subjects may not express their true feelings in the self-report measures. Previous research has had difficulty getting subjects to be reliable sources. However, it would appear to be difficult to obtain information on internal states by using direct observations.

The age group ranging from 8-12 years old consisting of both males and females was present in this study. There were Caucasian and African-American children who participated in this study; however, there was a significant difference between the number of Caucasians vs. the African-Americans due to the subjects being drawn from a limited area of Southern West Virginia and Eastern Kentucky. Also, there were significantly more boys in the sample than girls due to the fact that there are more boys in treatment at the mental health facility for emotional and behavioral problems. Future studies may focus on other population groups and including a fairly more equal amount of males and females.

Also not addressed in this study is parental influence, parents with a diagnosis of an emotional or mental disorder and other family history of psychiatric illness. Future studies may want to take these factors into consideration.

References

Achenbach, T.M. (1986). The Child Behavior Checklist. Revised manual, University of Vermont.

Ambrose, B., & Rholes, W.S. (1993). Automatic cognitions and the symptoms of depression and anxiety in children and adolescents: An examination of content-specificity hypothesis. Cognitive Therapy and Research, 17, 153-171.

American Psychiatric Association. (1980). The diagnostic and statistical manual of mental disorders. (3rd ed.). Washington, D.C.: Author.

American Psychiatric Association. (1994). The diagnostic and statistical manual of mental disorder. (4th rsed.). Washington, DC: Author.

Barrett, P.M., Rapee, R.M., Dadds, M.M., & Ryan, S.M. (1996). Family enhancement of cognitive style in anxious and aggressive children. Journal of Abnormal Child Psychology, 24, 187-203.

Beck, A.T. (1976). Cognitive therapy and the emotional disorders. New York: International Universities Press.

Beck, A.T., & Emery, G. (1985). Anxiety Disorders and Phobias: A Cognitive Perspective. New York: Basic Books.

Beidel, D.C. (1988). Psychological assessment of anxious emotional states in children. Journal of Abnormal Psychology, 97, 80-82.

Bell-Dolan, D.J. (1995). Social cue interpretation of anxious children. Journal of Clinical Child Psychology, 24, 1-10.

Bell-Dolan, D.J., & Last, C.G. (1990). Attributional style of anxious children. Paper presented at the 24th annual meeting of the Association for the Advancement of Behavior Therapy. San Francisco.

Bell-Dolan, D. & Wessler, A.E. (1994). Attributional style of anxious children: Extensions from cognitive theory and research on adult anxiety. Journal of Anxiety Disorders, 8, 79-96.

Benjamin, R.S., Costello, E.J., & Warren, M. (1990). Anxiety disorders in a pediatric sample. Journal of Anxiety Disorders, 4, 293-316.

Bibring, E. (1953). The mechanism of depression. In P. Greenacre (Ed.) Affective disorders. New York: International Universal Press, 13-48.

Blumberg, S.H., & Izard, C. (1986). Discriminating patterns of emotions in 10 and 11 year old children's anxiety and depression. Journal of Personality and Social Psychology, 5, 852-857.

Bourne, E.J. (1990). The Anxiety and Phobia Workbook. Oakland: New Harbinger Publications.

Brady, E.U., & Kendall, P.C. (1992) . Comorbidity of anxiety and depression in children and adolescents. Psychological Bulletin, 111, 244-255.

Byrne, B. (2000). Relationships between anxiety, fear, self-esteem and coping strategies in adolescence. Adolescence, 35, 201-216.

Callahan, S.A., Panichelli-Mindel, S.M., & Kendall, P.C. (1996). DSM-IV and internalizing disorders: modifications, limitations and utility. School Psychology Review,25, 297-308.

Campbell, S.B. (1986). Developmental Issues. In R. Gittelman (Ed). Anxiety disorders of childhood (pp.24-57). New York: Guilford Press.

Chansky, T.E., & Kendall, P.C. (1996). Social expectancies and self-perceptions of children with anxiety disorders. Manuscript submitted for publication.

Craske, M.G. (1997). Fear and anxiety in children and adolescents. Bulletin of the Menninger Clinic, 61, A4-A36.

Dorpat, T.L. (1976). Depressive affect. Journal of the American Academy of Psychoanalysis, 58, 3-28.

Freud, S. (1917). Mourning and melancholia: In Collected Papers. Iv. New York: Norton.

Gullone, E., & King, N.J. (1993). The fears of youth in the 1990's: contemporary normative data. Journal of Genetic Psychology, 154, 137-154.

Harter, S. (1985). Manual for the Self-Perception Profile for Children. Denver, CO: University of Denver.

Ingram, R.E., & Kendall, P.C. (1987). The cognitive side of Anxiety. Cognitive Therapy and Research, 11, 523-536.

Johnson, S.B. (1979). Children's fears in classroom settings. School Psychology Digest, 8, 382-396.

Kazdin, A.E., French, N.H., Unis, A.S., Esveldt-Dawson, K. & Sherick, R.B. (1984). Hopelessness, depression and suicidal intent among psychiatrically disturbed inpatient children. Journal of Clinical and Consulting Psychology, 35, 234-241.

Kelso, K.T. (1993). Cognitive Affective Links in Childhood Depression and Anxiety. Unpublished Manuscript, University of Kentucky at Lexington.

Kendall, P.C., & Chansky, T.E. (1991). Considering cognition in anxiety-disordered children. Journal of Anxiety Disorders, 5, 167-185.

Kendall, P.C., Chansky, T.E., Kane, M., Kim, R., Kortlander, E., Ronan, K., Sessa, F., and Siqueland, L. (1992). Anxiety disorders in youth: Cognitive-behavioral interventions. Needham Heights, MA: Allyn & Bacon.

Kendall, P.C., & Ingram, R. (1989). Cognitive-behavioral perspectives: Theory and research on depression and anxiety. In P.C.

King, N.J., Gullone, E., & Ollendick, T.H. (1992). Manifest anxiety and fearfulness in children and adolescents. Journal of Genetic Psychology, 153, 63-74.

Kovacs, M. (1981). Rating scales to assess depression in children. Acta Paedopsychiatrica, 46, 305-315.

Kovacs, M. (1992). The Children's Depression Inventory. Multi-Health Systems, Inc. 908 Niagara Falls Blvd., N. Tonawanda, NY 14120-2060.

Kovacs, M. & Beck, A.T. (1977). An empirical-clinical approach toward a definition of childhood depression. In J. Schulterbrandt and A. Raskin (Eds.) Depression in childhood: Diagnosis, treatment and conceptual models. New York: Raven Press.

Krohne, H.W., and Hock, M. (1991) . Relationships between restrictive mother-child interactions and anxiety of the child. Anxiety Research, 4, 109-124.

Lane, B., & Gullone, E. (1999). Common fears. A comparison of adolescents' self-generated fears. Journal of Genetic Psychology, 160, 194-205.

Lapouse, R., & Monk, M. (1959). Fears and worries in a representative sample of children. American Journal of Orthopsychiatry, 29, 803-818.

Laurent, J., & Stark, K.D. (1993). Testing the cognitive content-specificity hypothesis with anxious and depressed youngsters. Journal of Abnormal Psychology, 102, 226-237.

Ollendick, T.H. (1978). Fear Survey Schedule: Revised. (Available from T. Ollendick, Virginia Polytechnic Institute and State University, Blackburg, Virginia 24060.

Ollendick, T.H. (1983). Reliability & Validity for the Revised Fear Survey Schedule for Children (FSSC -R). Behavioral Research Therapy, 21, 685-692.

Ollendick, T.H., & King, N.J. (1991). Origins of childhood fears: an evaluation of Rachman's theory of fear acquistion. Behavior Research and Therapy, 21, 685-692.

Ollendick, T.H., Matson, J., and Helsel, W.J. (1985). Fears in children and adolescents: Normative data. Behavior Research and Therapy, 23, 465-467.

Ollendick, T.H., Yule, W., and Ollier, K. (1991). Fears in British children and their relationship to manifest anxiety and depression. Journal of Child Psychology and Psychiatry and Allied Disciplines, 32, 321-331.

Puig-Antich, J., Lukens, E., Davies, M., Goetz, D., Brennan-Quattrock, J., and Todak, G. (1985). Psychosocial functioning in prepubertal major depressive disorders: Interpersonal relationships during, the depressive episode. Archives of General Psychiatry, 42, 500-507.

Reynolds, C.R. & Richmond, B.O. (1985). Revised Children's Manifest Anxiety Scale Manual, Western Psychological Sciences, Los Angeles.

Ronan, K.R., Kendall, P.C., & Rowe, M. (1994). Negative affectivity in children: Development and validation of a self-statement questionnaire. Cognitive Therapy and Research, 18, 509-529.

Ryan, P.A. (1996). Cognitive variables of childhood depression. Unpublished Manuscript, West Virginia Graduate College, South Charleston.

Scherer, M.W., & Nakamura, C.Y. (1968). A fear survey schedule for children (FSS-FC): a factor analytic comparison with manifest anxiety (CMAS). Behavior Research and Therapy, 6, 173-182.

Seligman, M. & Peterson, C. (1986). A learned helplessness perspective on childhood depression: Theory and Research. In M. Rutter, C. Izard and P. Read (Eds.)

Depression in young people: Development and clincial perspectives. New York: Guildford Press, 223-247.

Spielberger, C. (1973). Manual for State-Trail Anxiety Inventory for Children. Palo Alto, CA: Consulting Psychologists Press.

Strauss, C.C., Frame, C.L., & Forehand, R. (1987). Psychosocial impairment associated with anxiety in children. Journal of Clinical Child Psychology, 16, 235-239.

Strauss, C.C., Lahey, B.B., Frick, P., Frame, C.L., & Hynd, G.W. (1988). Peer social status of children with anxiety disorders. Journal of Consulting and Clinical Psychology, 56, 127-141.

Strauss, C.C., Lease, C.A., Kazdin, A.E., Dulcan, M.K., & Last, C.G. (1989). Multi-method assessment of the social competence of children with anxiety disorders. Journal of Clinical Child Psychology, 18, 184-189.

Treadwell, K.R.H., and Kendall, P.C. (1996). Self-talk in youth with anxiety disorders: States of mind, content specificity and treatment outcome. Journal of Consulting and Clinical Psychology, 64, 941-950.

Watson, D., & Clark, L.A. (1984). Negative affectivity: the disposition to experience aversive emotional states. Psychological Bulletin, 96, 465-490.

Bibliography

Achenbach, T.M. (1986). The Child Behavior Checklist. Revised manual, University of Vermont.

Ambrose, B., & Rholes, W.S. (1993). Automatic cognitions and the symptoms of depression and anxiety in children and adolescents: An examination of content-specificity hypothesis. Cognitive Therapy and Research, 17, 153-171.

American Psychiatric Association. (1980). The diagnostic and statistical manual of mental disorders. (3rd ed.). Washington, D.C.: Author.

American Psychiatric Association. (1994). The diagnostic and statistical manual of mental disorder. (4th rsed.). Washington, DC: Author.

Barrett, P.M., Rapee, R.M., Dadds, M.M., & Ryan, S.M. (1996). Family enhancement of cognitive style in anxious and aggressive children. Journal of Abnormal Child Psychology, 24, 187-203.

Beck, A.T. (1976). Cognitive therapy and the emotional disorders. New York: International Universities Press.

Beck, A.T., & Emery, G. (1985). Anxiety Disorders and Phobias: A Cognitive Perspective. New York: Basic Books.

Beidel, D.C. (1991). Determining the reliability of psychophysiological assessment in childhood anxiety. Journal of Anxiety Disorders, 5, 139-150.

Beidel, D.C. (1988). Psychological assessment of anxious emotional states in children. Journal of Abnormal Psychology, 97, 80-82.

Beidel, D.C., Christ, M.A.G., & Long, P.J. (1991). Somatic complaints in anxious children. Journal of Abnormal Child Psychology, 19, 659-670.

Beidel, D.C., Turner, S.M., & Morris, T.L. (1995). A new inventory to assess childhood social anxiety and phobia: the social phobia and anxiety inventory for children. Psychological Assessment, 7, 73-79.

Bell-Dolan, D.J. (1995). Social cue interpretation of anxious children. Journal of Clinical Child Psychology, 24, 1-10.

Bell-Dolan, D.J., & Last, C.G. (1990). Attributional style of anxious children. Paper presented at the 24th annual meeting of the Association for the Advancement of Behavior Therapy. San Francisco.

Bell-Dolan, D. & Wessler, A.E. (1994). Attributional style of anxious children: Extensions from cognitive theory and research on adult anxiety. Journal of Anxiety Disorders, 8, 79-96.

Benjamin, R.S., Costello, E.J., & Warren, M. (1990). Anxiety disorders in a pediatric sample. Journal of Anxiety Disorders, 4, 293-316.

Bibring, E. (1953). The mechanism of depression. In P. Greenacre (Ed.) Affective disorders. New York: International Universal Press, 13-48.

Blumberg, S.H., & Izard, C. (1986). Discriminating patterns of emotions in 10 and 11 year old children's anxiety and depression. Journal of Personality and Social Psychology, 5, 852-857.

Bourne, E.J. (1990). The Anxiety and Phobia Workbook. Oakland: New Harbinger Publications.

Boyd, C.P., Gullone, E., Kostanski, M., Ollendick, T.H. and Shek, D.T. L. (2000). Prevalence of anxiety and depression in Australian adolescents: comparisons with worldwide data. Journal of Genetic Psychology, 161, 479-493.

Brady, E.U., & Kendall, P.C. (1992) . Comorbidity of anxiety and depression in children and adolescents. Psychological Bulletin, 111, 244-255.

Byrne, B. (2000). Relationships between anxiety, fear, self-esteem and coping strategies in adolescence. Adolescence, 35, 201-216.

Callahan, S.A., Panichelli-Mindel, S.M., & Kendall, P.C. (1996). DSM-IV and internalizing disorders: modifications, limitations and utility. School Psychology Review,25, 297-308.

Campbell, S.B. (1986). Developmental Issues. In R. Gittelman (Ed). Anxiety disorders of childhood (pp.24-57). New York: Guilford Press.

Chansky, T.E., & Kendall, P.C. (1996). Social expectancies and self-perceptions of children with anxiety disorders. Manuscript submitted for publication.

Craske, M.G. (1997). Fear and anxiety in children and adolescents. Bulletin of the Menninger Clinic, 61, A4-A36.

Crowley, S.L., Thompson, B., & Worchel, F. (1994). The children's depression inventory: A comparison of generabizability and classical test theory analyses. Educational & Psychological Measurement, 54, 705-714.

Dorpat, T.L. (1976). Depressive affect. Journal of the American Academy of Psychoanalysis, 58, 3-28.

Freud, S. (1917). Mourning and melancholia: In Collected Papers. Iv. New York: Norton.

Gullone, E., & King, N.J. (1993). The fears of youth in the 1990's: contemporary normative data. Journal of Genetic Psychology, 154, 137-154.

Harter, S. (1985). Manual for the Self-Perception Profile for Children. Denver, CO: University of Denver.

Hodges, K. (1990). Depression and anxiety in children: a comparison of self-report questionnaires to clinical interview. Journal of Consulting and Clinical Psychology, 2, 376-381.

Hodges, K. & Plow, J. (1990). Intellectual ability and achievement in psychiatrically hospitalized children with conduct, anxiety and affective disorders. Journal of Consulting and Clinical Psychology, 58, 589-595.

Ingram, R.E., & Kendall, P.C. (1987). The cognitive side of Anxiety. Cognitive Therapy and Research, 11, 523-536.

Johnson, S.B. (1979). Children's fears in classroom settings. School Psychology Digest, 8, 382-396.

Kazdin, A.E., French, N.H., Unis, A.S., Esveldt-Dawson, K. & Sherick, R.B. (1984). Hopelessness, depression and suicidal intent among psychiatrically disturbed inpatient children. Journal of Clinical and Consulting Psychology, 35, 234-241.

Kaslow, N.J., Stark, K.D., Printz, B., Livingston, R., and Tsai, S.L. (1992). Cognitive triad inventory for children: development and relation to depression and anxiety. Journal of Clinical Child Psychology, 21, 339-347.

Kelso, K.T. (1993). Cognitive Affective Links in Childhood Depression and Anxiety. Unpublished Manuscript, University of Kentucky at Lexington.

Kendall, P.C. (1993). Cognitive behavioral therapies with youth: guiding theory, current status and emerging developments. Journal of Consulting and Clinical Psychology,61, 235-247.

Kendall, P.C. (1994). Treating anxiety disorders in children: results of a randomized clinical trial. Journal of Consulting and Clinical Psychology, 62, 100-110.

Kendall, P.C., & Chansky, T.E. (1991). Considering cognition in anxiety-disordered children. Journal of Anxiety Disorders, 5, 167-185.

Kendall, P.C., Chansky, T.E., Kane, M., Kim, R., Kortlander, E., Ronan, K., Sessa, F., and Siqueland, L. (1992). Anxiety disorders in youth: Cognitive-behavioral interventions. Needham Heights, MA: Allyn & Bacon.

Kendall, P. C., Finch, A.J. Auerbach, S.M., Hooke, J.F., & Mikulka, P.J. (1976). The State-Trait Anxiety Inventory: A systematic evaluation. Journal of Consulting and Clinical Psychology, 44, 406-412.

Kendall, P.C., & Ingram, R. (1989). Cognitive-behavioral perspectives: Theory and research on depression and anxiety. In P.C.

Kendall, P.C., Kortlander, E., Chansky, T.E., & Brady, E.U. (1992). Comorbidity of anxiety and depression in youth: treatment implications. Journal of Consulting and Clinical Psychology, 60, 869-880.

King, N.J., Gullone, E., & Ollendick, T.H. (1992). Manifest anxiety and fearfulness in children and adolescents. Journal of Genetic Psychology, 153, 63-74.

Kovacs, M. (1981). Rating scales to assess depression in children. Acta Paedopsychiatrica, 46, 305-315.

Kovacs, M. (1992). The Children's Depression Inventory. Multi-Health Systems, Inc. 908 Niagara Falls Blvd., N. Tonawanda, NY 14120-2060.

Kovacs, M. & Beck, A.T. (1977). An empirical-clinical approach toward a definition of childhood depression. In J. Schulterbrandt and A. Raskin (Eds.) Depression in childhood: Diagnosis, treatment and conceptual models. New York: Raven Press.

Kovacs, M., Gatsonia, C., Paulauskas, S.L., & Richards, C. (1989). Depressive disorders in childhood IV. A longitudinal study of comorbidity with and risk for anxiety disorders. Archives of General Psychiatry, 46, 776-782.

Krohne, H.W., and Hock, M. (1991) . Relationships between restrictive mother-child interactions and anxiety of the child. Anxiety Research, 4, 109-124.

LaGreca, A.M., & Stone, W.L. (1993). Social Anxiety Scale for Children - Revised: Factor structure and concurrent validity. Journal of Clinical Child Psychology, 22, 17-27.

Lane, B., & Gullone, E. (1999). Common fears. A comparison of adolescents' self-generated fears. Journal of Genetic Psychology, 160, 194-205.

Lapouse, R., & Monk, M. (1959). Fears and worries in a representative sample of children. American Journal of Orthopsychiatry, 29, 803-818.

Laurent, J., & Stark, K.D. (1993). Testing the cognitive content-specificity hypothesis with anxious and depressed youngsters. Journal of Abnormal Psychology, 102, 226-237.

Laurent, J., Stark, K.D., & Landau, S. (1993). Conditional probabilities in the diagnosis of depressive and anxiety disorders in children. School Psychology Review, 22, 98-115.

Lerner, J., & Safren, S.A., (1999). Differentiating anxious and depressive self-statements in youth: factor structure of the negative affect self-statement questionnaire among youth referred to an anxiety disorders clinic. Journal of Clinical Child Psychology, 28, 82-94.

Lonigan, C.J., Carey, M.P., & Finch, A.J. (1994) Anxiety and depression in children and adolescents: Negative affectivity and the utility of self-reports. Journal of Consulting and Clinical Psychology, 62, 1000-1008.

Michelson, L., & Ascher, L.M. (1987). Anxiety and stress disorders: Cognitive-behavioral assessment and treatment. New York: The Guilford Press.

Newcomer, P.L., Barenbaum, E., & Peason, N. (1995). Depression and anxiety in children and adolescents with learning disabilities, conduct disorders and no disabilities. Journal of Emotional & Behavioral Disorders, 3, 27-40.

Ollendick, T.H. (1978). Fear Survey Schedule: Revised. (Available from T. Ollendick, Virginia Polytechnic Institute and State University, Blackburg, Virginia 24060.

Ollendick, T.H. (1983). Reliability & Validity for the Revised Fear Survey Schedule for Children (FSSC -R). Behavioral Research Therapy, 21, 685-692.

Ollendick, T.H., & King, N.J. (1991). Origins of childhood fears: an evaluation of Rachman's theory of fear acquistion. Behavior Research and Therapy, 21, 685-692.

Ollendick, T.H., Matson, J., and Helsel, W.J. (1985). Fears in children and adolescents: Normative data. Behavior Research and Therapy, 23, 465-467.

Ollendick, T.H., Yule, W., and Ollier, K. (1991). Fears in British children and their relationship to manifest anxiety and depression. Journal of Child Psychology and Psychiatry and Allied Disciplines, 32, 321-331.

Pellegrino, J.F., Singh, N.N., & Carmanico, S.J. (1999). Concordance among three diagnostic procedures for identifying depression in children and adolescents with EBD. Journal of Emotional & Behavioral Disorders, 7, 118-128.

Puig-Antich, J., Lukens, E., Davies, M., Goetz, D., Brennan-Quattrock, J., and Todak, G. (1985). Psychosocial functioning in prepubertal major depressive disorders: Interpersonal relationships during, the depressive episode. Archives of General Psychiatry, 42, 500-507.

Rabian, B., Embry, L., & MacIntyre, D. (1999). Behavioral validation of the childhood anxiety sensitivity index in children. Journal of Clinical Child

Psychology, 28, 105-113.

Rabian, B., Peterson, R.A., Richters, J., & Jensen, P.S. (1993). Anxiety sensitivity among anxious children. Journal of Clinical Child Psychology, 22, 441-446.

Reynolds, C.R. & Richmond, B.O. (1985). Revised Children's Manifest Anxiety Scale Manual, Western Psychological Sciences, Los Angeles.

Ronan, K.R., Kendall, P.C., & Rowe, M. (1994). Negative affectivity in children: Development and validation of a self-statement questionnaire. Cognitive Therapy and Research, 18, 509-529.

Ryan, P.A. (1996). Cognitive variables of childhood depression. Unpublished Manuscript, West Virginia Graduate College, South Charleston.

Scherer, M.W., & Nakamura, C.Y. (1968). A fear survey schedule for children (FSS-FC): a factor analytic comparison with manifest anxiety (CMAS). Behavior Research and Therapy, 6, 173-182.

Seligman, M. & Peterson, C. (1986). A learned helplessness perspective on childhood depression: Theory and Research. In M. Rutter, C. Izard and P. Read (Eds.) Depression in young people: Development and clincial perspectives. New York: Guildford Press, 223-247.

Silverman, W.K. (1991). Diagnostic reliability of anxiety disorders in children using structured interviews. Journal of Anxiety Disorders, 5, 105-124.

Spielberger, C. (1973). Manual for State-Trail Anxiety Inventory for Children. Palo Alto, CA: Consulting Psychologists Press.

Stark, K.D., Humphrey, L.L., Laurent, J., Livingston, R., & Christopher, J. (1993). Cognitive, behavioral, and family factors in the differentiation of depressive and anxiety disorders during childhood. Journal of Consulting and Clinical Psychology, 61, 878-886.

Stark, K.D., Kaslow, N.J., & Laurent, J. (1993). The assessment of depression in children: Are we assessing depression or the broad-band construct of negative affectivity? Journal of Emotional & Behavioral Disorders, 1, 149-155.

Strauss, C.C. (1990). Anxiety disorders of childhood and adolescence. School Psychology Review, 19, 142-158.

Strauss, C.C., Frame, C.L., & Forehand, R. (1987). Psychosocial impairment associated with anxiety in children. Journal of Clinical Child Psychology, 16, 235-239.

Strauss, C.C., Lahey, B.B., Frick, P., Frame, C.L., & Hynd, G.W. (1988). Peer social status of children with anxiety disorders. Journal of Consulting and Clinical Psychology, 56, 127-141.

Strauss, C.C., Lease, C.A., Kazdin, A.E., Dulcan, M.K., & Last, C.G. (1989). Multi-method assessment of the social competence of children with anxiety disorders. Journal of Clinical Child Psychology, 18, 184-189.

Treadwell, K.R.H., and Kendall, P.C. (1996). Self-talk in youth with anxiety disorders: States of mind, content specificity and treatment outcome. Journal of Consulting and Clinical Psychology, 64, 941-950.

Vasey, M.W., Daleiden, E.L., Williams, L., & Brown, L.M. (1995). Biased attention in childhood anxiety disorders: A preliminary study. Journal of Abnormal Child Psychology, 23, 267-279.

Waterman, G.S., & Ryan, N.D. (1993). Pharmacological treatment of depression and anxiety in children and adolescents. School Psychology Review, 22, 228-243.

Watson, D., & Clark, L.A. (1984). Negative affectivity: the disposition to experience aversive emotional states. Psychological Bulletin, 96, 465-490.

Appendix A:

Raw Data

Anxious and Depressed		CDI	RCMAS	FSSC-R	STAIC(Trait)
	T-score	(63 or higher)	(63 or higher)	(raw score)	(T-score)
Justin	(10 yrs)	71	64	142	56
David W.	(7 yrs)	72	64	133	62
Derrick	(8 yrs)	69	65	126	60
Roger B.	(11 yrs)	76	66	129	64
Zachary H.	(11 yrs)	65	64	129	55
Marshall H.	(12 yrs)	72	66	127	74
Roger S.	(12 yrs)	69	66	127	56
Johnny	(12 yrs)	67	66	120	64
Alicia	(12 yrs)	63	65	125	66
Jill K.	(10 yrs)	72	64	119	60
Jennifer M.	(11 yrs)	75	63	134	60
Angela F.	(9 yrs)	79	68	141	74
Beverly L.	(12 yrs)	68	69	145	67
Kristi D.	(8 yrs)	78	65	138	64
Brittany H.	(10 yrs)	68	64	142	57

Anxious and NOT Depressed		CDI	RCMAS	FSSC-R	STAIC(Trait)
	T-score	(below 63)	(63 or higher)		
Timmy G.	(12 yrs)	61	67	125	68
Zack P.	(12 yrs)	50	64	127	60
Chris C.	(10 yrs)	56	64	125	64
Kevin B.	(11 yrs)	60	64	119	59
Nicholas K.	(12 yrs)	39	65	137	67
Zack M.	(8 yrs)	45	63	143	62
Jessica	(11 yrs)	61	64	121	66
Crystal C.	(7 yrs)	60	63	140	67
Inysha	(8 yrs)	60	66	138	68
Earsel	(9 yrs)	39	65	137	56
Chris G.	(12 yrs)	45	65	148	64
Kevin S.	(12 yrs)	54	64	133	57
Katie	(8 yrs)	51	63	164	59
Chris N.	(12 yrs)	46	68	156	75
Latasha M.	(11 yrs)	51	63	137	60

pressed and NOT Anxious	CDI	RCMAS	**FSSC-R**	**STAIC**(Trait)
	T-score (of 63 or higher)	(below 63)		
John David (9 yrs)	67	39	101	44
David A. (11 yrs)	67	43	110	43
John M. (10 yrs)	73	59	114	50
Stephen G. (12 yrs)	81	39	97	43
Brandon C.(9 yrs)	100	51	115	43
K. Blanken (11 yrs)	69	52	108	50
Dewayne N.(11 yrs)	79	38	114	44
Larry D. (10yrs)	73	54	110	27
T. J. McCoy(9yrs)	75	56	96	53
Mike S. (12 yrs)	69	53	102	53
L.G. (10 yrs)	77	47	105	53
Tara R. (12 yrs)	68	47	111	38
Virginia H. (8 yrs)	65	32	106	55
Jessica B. (8 yrs)	63	43	103	45
Amanda (12 yrs)	74	50	110	55

)T Anxious and NOT Depressed	CDI	RCMAS	**FSSC-R**	**STAIC**(Trait)
	T-score (below 63)	(below 63)		
John P. (9 yrs)	58	50	93	53
Melissa M. (8 yrs)	61	41	98	50
John R. (10yrs)	49	44	99	48
Adam B. (8 yrs)	54	37	102	51
David W. (7 yrs)	54	49	96	47
Amy R. (8 yrs)	54	41	94	60
Mandy B. (9 yrs)	54	44	96	51
Lindsey P. (12 yrs)	49	45	88	44
Danielle O. (11 yrs)	53	44	95	45
Toby B. (11 yrs)	56	49	102	53
Larry D. (11 yrs)	41	35	108	53
Ricky T. (12 yrs)	53	39	103	53
David E. (12 yrs)	42	61	99	53
Kelly J. (12 yrs)	41	50	105	57
Brianna F. (10 yrs)	49	41	105	59

Fear Survey Schedule for Children- Revised(Subscale RAW Scores)

	Failure & Criticism	The Unknown	Minor Injury & Small Animals	Danger and Death	Medical Fears	Other
epressed and NOT Anxious						
1. John David (9 years)	33	19	21	18	4	6
2. David A. (11 years)	31	21	24	21	7	6
3. John M (10 years)	47	20	21	15	4	7
4. Stephen (12 years)	33	21	18	15	4	6
5. Brandon C. (9 years)	43	25	20	14	7	6
6. K. Blanken (11 years)	39	22	20	16	5	6
7. Dewayne N. (11 years)	42	22	22	18	4	6
8. Larry D. (10 years)	33	22	25	20	4	6
9. T. J. McCoy (9 years)	30	20	20	15	5	6
0. Mike S. (12 years)	31	20	20	18	7	6
1. L.G. ((10 years)	37	23	18	17	4	6
2. Tara R. (12 years)	39	19	22	20	4	7
3. Virginia H. (8years)	30	22	26	17	5	6
4. Jessica B. (8 years)	29	24	23	17	4	6
5. Amanda (12 years)	35	24	23	17	4	7
OT Anxious and NOT Depressed						
1. John P. (9 years)	29	20	19	15	4	6
2. Melissa M. (8 years)	29	22	20	17	4	6
3. John R. (10 years)	30	22	21	16	4	6
4. Adam B. (8 years)	29	22	22	19	4	6
5. David W. (8 years)	27	22	21	16	4	6
6. Amy R. (8 years)	25	18	22	18	5	6
7. Mandy B. (9 years)	24	21	25	16	4	6
8. Lindsey P. (12 years)	25	18	21	14	4	6
9. Danielle O. (11 years)	27	18	22	16	4	8
0. Toby B. (11 years)	30	20	21	17	6	8
1. Larry D. (11years)	25	23	26	22	6	6
2. Ricky T. (12 years)	34	20	20	17	6	6
3. David E. (12 years)	29	21	21	18	4	6
4. Kelly J. (12 years)	30	21	25	14	7	8
5. Brianna F. (10 years)	28	22	23	21	5	6

nxious and Depressed	Failure & Criticism	The Unknown	Minor Injury & Small Animals	Danger and Death	Medical Fears	Other
Justin (10 years)	38	34	30	25	8	7
David W. (8 years)	37	30	27	24	8	7
Derrick (8 years)	32	30	26	22	8	8
Roger B. (11 years)	35	30	26	23	7	8
Zachary H. (11 years)	32	31	26	24	8	8
Marshall H. (12 years)	36	28	26	23	7	7
Roger S. (12 years)	36	27	26	24	7	7
Johnny (12 years)	32	28	24	23	7	6
Alicia (12 years)	41	28	23	22	4	7
Jill K. (10 years)	34	27	25	20	7	6
Jennifer M. (11 years)	38	29	30	23	8	6
Angela F. (9 years)	42	31	31	23	8	6
Beverly L. (12 years)	40	33	32	25	8	7
Kristi D. (8 years)	35	34	29	24	8	8
Brittany H. (10 years)	38	33	30	25	8	8
nxious and NOT Depressed						
Timmy G. (12 years)	35	28	25	23	7	7
Zack P. (12 years)	35	31	23	24	7	7
Chris C. (10 years)	36	28	25	23	7	6
Kevin B. (11 years)	29	30	24	24	5	7
Nicholas K. (12 years)	33	35	31	23	8	7
Zack M. (12 years)	35	36	30	26	8	8
Jessica (11 years)	32	35	28	15	4	7
Crystal C. (8 years)	39	33	28	23	8	9
Inysha (8 years)	37	34	30	22	9	6
Earsel (9 years)	34	37	28	24	8	6
Chris G. (12 years)	38	38	31	27	8	6
Kevin S. (12 years)	40	28	28	26	4	7
Katie (8 years)	47	32	39	33	7	6
Chris N.(12 years)	43	38	33	26	9	7
Latasha M. (11 years)	34	33	29	26	8	7

Appendix B:

Permission and Consent Forms

DESCRIPTION OF PROJECT: PARENT CONSENT FORM

I, _____, agree to allow my child, _____, to participate in the research study under the direction of Ms. Browning. I understand that while the study will be under her supervision, other professional individuals who work with her may assist or act in her behalf.

I understand that the purpose of this study is to explore the thought and feelings of children who may be experiencing some difficulties in school or at home. In particular, the study will attempt to examine the way the children view themselves, their future and the world around them.

I understand that my child was referred, with my permission to Ms. Browning and that some of the results obtained through evaluation may be analyzed by Ms. Browning as part of this project. I understand that my child will be asked to respond to several different questionnaires which will ask my child how he/she feels about him/herself, how he/she might interpret events that occur in daily life, and how hopeful he/she is about the future. I understand that the entire process will take approximately one hour to complete.

I understand that participation in this study is entirely voluntary. I realize I may discontinue my child's participation at any time and for any reason. The information obtained will be kept confidential. No personally identifiable material will be included in any analyses or publications that may result from this study.

I understand that if I have any questions about the study, I may contact Ms. Browning at 237-9871. I will receive a copy of this consent form.

_____ _____
Date Parent/Guardian

I have explained and defined in detail the research procedure in which the subject has consented to participate.

_____ _____
Date Principal Investigator

WRITTEN CONSENT FORM FOR CHILD

I understand that I am going to be in a research study with Ms. Browning. I don't have to do it, and I can stop at any time. I understand that the study will take about an hour of my time, and that she will ask me some questions about myself and ask me to fill out some forms for her. I understand that nobody is going to see my answers except for Ms. Browning. Under these conditions, I agree to be a part of this study.

_____ _____

Date Child Signature

_____

Principal Investigator

West Virginia Graduate College
(Consent form)

I, _____, give permission for psychological testing to be done on myself, or my child,_____ _____, I understand that the
(Child's Name)
results of this testing process will be shared with the College's Faculty Supervisor and Mountain Comprehensive Care Center's Agency Supervisor. This testing process is in partial fulfillment of the requirements for a Masters of Arts Degree in Psychology at the West Virginia Graduate College in South Charleston, WV. The purpose of this process is to train students to administer, score and interpret psychological tests. The results will be kept strictly confidential and will be used solely for education purposes by the College.

Also, I agree for the student to videotape the testing session for educational purposes. I understand that I may withdraw from the testing procedure at any time. Yes or No (circle one).

_____ _____
Clients Signature Date Signed

_____ _____
Witness Date Signed

Mountain Comprehensive Care Center

Cognitive and Emotional

140 Hospital Drive
South Williamson, Kentucky 41503

MAILING ADDRESS:
P. O. Box 699
Williamson, WV 25661

Telephone: (606) 237-9871 or (606) 237-9893

August 25, 1997

Dr Stephen O'Keefe
Marshall University Graduate College
100 Angus Peyton Drive
South Charleston, WV

RE Robin Browning
Conduct of Thesis Study

Dear Dr. O'Keefe:

Robin Browning is an employee at Mountain Comprehensive Care Center in our South Williamson Outpatient Clinic. It is my understanding that she plans to conduct a study considering anxiety and fear in children as her thesis topic for completion of requirements for the Masters of Arts in Psychology.

She has been given permission to conduct this study with children, who are being treated at our mental health facility, provided that their parents give written consent. I have reviewed the testing materials and feel that they should not interfere with the child's treatment. Therefore, the conduct, behavior and study are approved within the setting of this agency.

We are willing to assist Ms. Browning in any way possible. If you need additional information or have any questions, please contact me at (606) 886-8572.

Sincerely,

Steve Schenck, M.A.
Executive Director

SS/bm