

**A POST-TREATMENT EVALUATION OF
THE COMBINED EFFECTS OF IMIPRAMINE
PHARMACOTHERAPY AND BRIEF PSYCHOTHERAPY
IN THE TREATMENT OF CHILDHOOD ANXIETY DISORDERS**

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Dissertation submitted to the Faculty of the
Virginia Polytechnic Institute and State University
in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

in

Family and Child Development

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January, 1998

Blacksburg, Virginia

KEY WORDS: CHILDHOOD ANXIETY DISORDERS, PHARMACOTHERAPY, PSYCHOTHERAPY

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(ABSTRACT)

This study evaluated a treatment program for anxiety disordered children, ages five to twelve years, utilizing both qualitative and quantitative methodologies. The treatment program integrated Imipramine pharmacotherapy and brief psychotherapy. The participants' nuclear and extended family histories were examined in terms of the occurrence of psychopathology and endemic transactional patterns. The examination of family patterns utilized Murray Bowen's Generational Model, as well as the T-F-A model of Hutchins and Cole, as a means of explaining the transmission of anxiety in the family. Ten children suspected of experiencing anxiety disorders were referred by pediatric physicians for treatment. Following an initial diagnostic assessment, children were placed on 25 milligrams of Imipramine per day for four to six weeks, while participating in weekly conjoint psychotherapy with their mothers for a six to eight-week period.

A post-treatment evaluation was conducted by selecting ten prototypic participants. Selection was based upon age, diagnosis of overanxious disorder or separation anxiety disorder in childhood, and a time interval of no more than one year or

less than one week following treatment. Semi-structured interviews were conducted with mother-child pairs separately to evaluate participants' perceptions of pre- and post-treatment symptom levels and family dynamics. DSM-III diagnostic criteria, Bowenian and T-F-A models served as the frameworks for organizing and evaluating qualitative data. All child participants experienced a dramatic and lasting resolution of both OAD and SAD symptomology. A quantitative analysis was performed utilizing the Wilcoxon sign rank to compare pre- and post-treatment symptom levels, with a significant effect by treatment occurring at the .005 level of significance. Cross-validation of treatment outcome was achieved through review of medical records, original psychotherapy notes, and videotapes of the interviews. Qualitative data regarding transgenerational medical and psychological disorders and family dynamics was generated. The data supported the Unitary model of generational family pathology. Six of seven Bowenian constructs were confirmed in this sample. The T-F-A model was used to demonstrate a cyclical pattern of reassurance, anxiety reduction, and child dependency between anxious children and their mothers. These results were discussed to provide a better understanding of the etiology and treatment of childhood anxiety disorders (OAD and SAD). The term "anxogenic family" was suggested to convey the interaction of genetics and generational learning in the families of anxiety disordered children. Implications for future research and modification of the DSM-IV regarding childhood anxiety disorders were discussed.

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Chapter 1

Introduction

A comprehensive review of the major theoretical systems in the field of child psychopathology revealed a lack of clearly defined and well-differentiated diagnostic categories for childhood anxiety. Early research into the specific properties of non-psychotic childhood disorders was dominated by taxonomic systems utilizing a single dimension referred to as "anxiety/withdrawal" or "internalizing problems" (Quay, 1986). Other researchers asserted that, historically, there has existed a strong tendency to view anxiety disorders in childhood as a single entity called "emotional disorders" or "fears" (Gittleman, 1986; Werry, 1991). These researchers asserted that in actuality, childhood anxiety disorders were best characterized as distinct clinical entities that share a high rate of co-morbidity. Development of the DSM-III diagnostic system in 1980 allowed for the further delineation of childhood anxiety into the subcategories of overanxious disorder (OAD) and separation anxiety disorder (SAD). As a result of this development, research occurring prior to 1980 was of limited usefulness when attempting to understand overanxious disorder and separation anxiety disorder. The development of the DSM-III represented an effort to achieve diagnostic clarity through the identification of empirically derived symptom clusters that accurately defined and differentiated clinical syndromes. Despite this advancement, there remained a persistent tendency to combine all childhood anxiety disorders together into a single category. Consequently, since 1980 there has been a paucity of research in the area of childhood anxiety disorders (Werry, 1991).

In terms of the treatment of childhood anxiety disorders, traditionally a significant gap has existed between research and treatment efforts. Disparities in treatment orientations between and within professional groups created a major obstacle in the development of a unified research focus. The controversy between the relative effectiveness of pharmacological versus psychotherapeutic interventions functioned to hamper developments in the field. Such a division accounted for poorly researched, isolated and only partially effective approaches to therapeutic interventions with children (Alexander & Malouf, 1983; Conners, 1972).

Disparities were also reflected in the domain of applied clinical research, wherein there were virtually no studies that attempted to combine chemotherapeutic and psychotherapeutic treatment of this disorder (Alexander & Malouf, 1983). As late as 1989, research into the incidence, prevalence and functional status of childhood anxiety disorders has been marked by "a virtual absence of inquiry" (Stavrakaki & Gaudet, 1989). Others report that the subjective experiences and biologic concomitants of these disorders in children and adolescents remained a "virtual unexplored ground" (Kotsopoulos, 1989). Various theoretical and methodological obstacles rendered comprehensive research into childhood anxiety disorders virtually non-existent (Kotsopoulos, 1998; Mattison, 1989; Bernstein & Borchardt, 1992; Werry, 1991; Gittleman, 1986).

A major theoretical controversy has centered around biologic versus social etiology. This controversy in turn produced methodological discrepancies over the relative value of drug versus non-drug, or combined intervention models. Applied

chemotherapy research encountered problems in areas such as clinical versus performance effects of medications, placebo effects, withholding medication from non-treatment controls, societal reluctance to prescribe psychotropic medications to children, the idiosyncratic effects of medication and measuring results by self-report. Psychotherapy research, on the other hand, encountered a similar set of obstacles including: Diagnostic reliability and overlap; severity and duration of the disorder; standardization of treatment effects; controlling non-treatment effects; and therapist-client variables, such as sex, age, attraction and perception.

Purpose.

This study described a model for the etiology and treatment of childhood anxiety disorders and its effectiveness. Qualitative methodologies were utilized to evaluate the effectiveness of this multimodal treatment model that I previously developed and clinically applied. This etiological and treatment paradigm embraced the biologic, social/familial and chemotherapeutic/ psycho-therapeutic influences involved in the successful diagnosis, treatment, and recovery from anxiety disorders in childhood.

I developed the concept of an interactive or “anxogenic” model in studying the parent/child relationship to account for the combined contributions of genetics and social learning in the formation and maintenance of childhood anxiety disorders. A dyadically-based psychotherapeutic model was utilized to treat the familial/social component of the disorder. In concert with short-term chemotherapy, the psychotherapeutic interventions

formed the basis of the multimodal intervention strategy that combined and effectively treated the bio-social symptom complex.

It was my contention that, if one views the etiology of childhood anxiety disorders as an interaction between physiological and social influences, an effective model for therapeutic intervention should embrace both pharmacologic and psychosocial intervention strategies.

Research Objectives.

1. To explore the intergenerational and clinical extended family histories in order to discover themes relating to mental health and family interactions.

Appendix A-I; Questions A-G.

2. To gather the clinical and developmental history of the client and nuclear family, relating to patterns of parenting style, coping with anxiety, and developmental information on the child.

Appendix A-II; Questions A-J

Appendix B-I; Questions A-H

3. To assess the child's and family's perceptions of the child's anxiety disorder, relative to family relationships and clinical history and coping styles.

Appendix A-III; Questions A-F, Child Questions

Appendix A-IV; Questions A-H

4. To understand the child's and family's perceptions of the therapeutic process and outcome across pharmacologic and psycho-therapeutic modalities.

Appendix A-V; Questions A-F.

Appendix B-II; Questions A-H.

5. To explore the child's and family's perceptions of the anoxic parent-child dyad and how this changes via therapeutic intervention.

Appendix B-I; Questions B, F, G, H

6. To explore the child's, family's, and pediatric physicians' perceptions of the child's recovery and recovery over time.
7. To determine the family's and child's perceptions of emergent pathology following the child's initial treatment.

Appendix A-VII; Questions A-B.

Child. Appendix A-II; Questions F, H.

Chapter 2

Review Of Literature

Overview

The following review of the literature was designed to elaborate theoretical perspectives and treatment models associated with anxiety disorders in childhood. This section provides clarification of the terms and concepts associated with this field of study. Additionally, this section provides a review of the related research. The areas of review include: Theoretical frameworks, definition of terms, related concepts in the literature, clinical literature related to the topic, and the significance of this study in relation to existing literature.

Theoretical Frameworks

Biosocial/Interactive Model.

Defined as a new sub-area of biology, psychobiology has been defined as "the study of the biological basis of all social behavior" (Wilson, 1975). The biosocial model as represented by psychobiology focuses on social structures, primarily at the level of the entire society, rather than the individual (Miller, 1989). This field of study encompasses aspects of ethology, ecology, genetics, and population biology, as well as clinical psychobiology. This could be viewed as the interaction between social behavior, its biological basis, and the manifestation of individual or family psychopathology. The term "clinical psychobiology" comes closest to describing a theoretical framework that is based upon the development of clinical conditions resulting from the interactions between

biophysiological and social/interactive influences. Contemporary writings that approach childhood anxiety disorders from a biosocial perspective appear to depict a bi-directional or circular relationship between the physiological and social influences, wherein neither is considered causative or pre-eminent. For example, one researcher notes: "Currently, what is known is that anxiety disorders are familial, and the role for genetics has been suggested, however, the exact nature of this familial factor has yet to be revealed unequivocally" (Turner, Beidel, & Epstein, 1991).

Support for the biological basis of childhood anxiety disorders is provided through a review of genetic and etiological studies later in this chapter. The biological side of the interactive model does not represent a formal theory per se, but rather a collection of supportive research findings. The biological influences are discussed in the section of this chapter entitled "Clinical Literature Related to the Topic". The social side of the interactive model must embrace a theoretical framework or a combination of frameworks that adequately explain social behavior on the basis of genetic or physiological influences. Bowen's generational model and the T-F-A cognitive/behavioral model are utilized as frameworks here. These frameworks are delineated and used to understand the generational, familial and psychological aspects of childhood anxiety disorders. This combination of research findings on genetic influences and the presentation of specific social-based theoretical models guided the development of the clinical intervention strategies used in this study.

Bowen's Generational Model.

Much of Bowen's theory was based upon his clinical work with the families of schizophrenic patients in psychiatric facilities (Bowen, 1978). Bowen began to conceptualize the health of these families in terms of a characteristic lack of emotional and intellectual differentiation between members. Bowen utilized six basic inter-related concepts in the construction of his theory. These are as follows: The differentiation of self, the nuclear family emotional system, family protection process, emotional triangles, the inter-generational transmission process, and the influence of sibling position. Bowen's theory of the inter-relationship between these six areas was primarily influenced by two variables: Anxiety in the social system, and the degree of integration of the self. One or more individuals in the family social system experienced anxiety as a result of the fusion or lack of differentiation between the individual's emotional and intellectual states. While it was not completely clear, Bowen seems to suggest a circular relationship, wherein anxiety in an individual resulted in a lack of differentiation between intellectual and emotional states; and in turn, this lack of differentiation may result in anxiety in the individual. It is further suggested that an individual family member's anxiety and lack of emotional differentiation was in turn transmitted onto other family members. It was also transmitted across generations within the same family as a result of what Bowen termed the "family projection process". The mechanism by which the fusion or lack of differentiation became projected from one generation to another was the result of an emotional triangulation. In the presence of chronic and high anxiety, tension develops in the individual, resulting in

symptoms or behavioral dysfunction. Anxiety was said to be infectious and spread through the family system when the emotionally-fused family member reacted to life events emotionally, and the emotions overwhelmed the intellect. In a well-differentiated family member, the intellect was said to function separately from the emotions. The self was said to be well-integrated when emotions and the intellect were adequately separate or differentiated. A high degree of emotional fusion within the individual translated into a high degree of emotional and behavioral fusion between family members at the level of the family system. The influence of sibling position, which may include birth order, was based upon the notion that an individual's vulnerability and power may be affected relative to their sibling position. Bowen also assumed that tension between any two members, such as the marital dyad, represented a most unstable unit. Triangulation occurs when a third family member, object, or concept becomes the focal point of tension within the dyadic unit. The consequent formation of a triangle was said to be stable, and functions as a homeostatic regulator of family tension and anxiety. The family system that was relatively free of anxiety was composed of well-differentiated individuals with a well-integrated sense of self. These individuals were differentiated from other family members, and had developed person-to-person relationships wherein emotional reactivity was well-controlled. Healthy members were also said to have the ability to de-triangulate from conflicts between other family members. When anxiety was not present, emotional fusion was relatively absent and relationships were guided by the intellect, in contrast to individuals who were controlled by emotionality and anxiety.

While Bowen's generational systems model provided a logical framework for viewing the transmission of anxiety within and between family members and across family generations, there was little mention as to the actual genesis or origins of anxiety per se.

The T-F-A Model.

The T-F-A model (Hutchins & Cole, 1992) was developed as a system of assessment and counseling for the helping profession. This unique model integrates the works of major theorists in the areas of Cognitive, Humanistic, and Behavioral Psychology. Examples in each of these areas include: Meichenbaum and Genest (1980) and Bandura (1981) in the Cognitive school, Carl Rogers in the Humanistic school (Rogers, 1961), and B.F. Skinner (1953) and Bandura (1981) in the Behavioral areas. Other major theoretical systems have been utilized by the authors of the T-F-A model as well, and a description of these contributors may be found in a description of the T-F-A model (Hutchins & Cole, 1992).

Essentially, the T-F-A system is structural along an A, B, C model, antecedents (A), Behavior (B), and Consequences (C). The antecedent event (A), could be described as the external context, or where, when, or with whom the behavior occurs. The Behavior (B) describes the subject's thoughts, feelings, and actions. Behavior in this system may include the subject's specific reactions or a composite of cognition, affect, and behavior. Consequences (C) involve the outcomes associated with specific antecedents and behaviors. The consequences resulting from specific antecedents and behaviors may

change from one event to another, or between one individual and another regardless of the similarities between antecedents and behaviors, across different situations.

The T(thought) F(feeling) and A(Action) system could be described as a triadic-structural inter-relationship that exists within the domain of the Behavioral (B) portion of the A-B-C model.

There is a three-way reciprocal relationship between the T, F, and A points of the triangle, in that any one component may affect the other. A three-point scale on each side of the triangle denotes the relative influence of the T, F, and A factors. Twenty-seven possible triads may be grouped into four major categories. The qualitative nature of each triad is best understood as a blending of relative T-F-A influences. The T-F-A model would propose that when a triad is created by connecting the midpoints of each side of the triangle, a balance of thought, feeling, and action is obtained. This triad is a profile for successful problem-solving. The authors appeared reluctant to describe a triadic model for “mental health” in that any given triad may have both payoffs and strengths in a given situation. Consequently, any one of the twenty-seven triads may describe desirable or undesirable mental health patterns.

Diagnosis And The Classification Of Childhood Anxiety Disorders

The Diagnostic and Statistical Manual III-Revised, published by the American Psychiatric Association (1987), is utilized as the standard for the clinical diagnosis of psychiatric disorders. Childhood anxiety disorders are located in the DSM III-R in the section entitled, "Disorders usually first evident in infancy, childhood or adolescence". In this section, the manual attempts to define the various subcategories of anxiety disorders. The taxonomy is divided into eleven subcategories: Common symptomology, associated features, age of onset, course, impairment, complications, pre-disposing factors, prevalence, sex ratio, familial pattern, and differential diagnosis. It is evident in the structure of this nomenclature that the DSM III-R (1987) is a research-based classification system that references observable and prevalent clinical entities. According to the DSM III-R, one subclass includes disorders in which anxiety was the predominate clinical feature. In the first two categories, separation anxiety disorder and avoidant disorder of childhood or adolescence, the anxiety was focused on specific situations. In the third category of overanxious disorder, the anxiety was generalized to a variety of situations.

For the purposes of this research, I chose to eliminate avoidant disorder of childhood or adolescence as a sub-category under study due to recent research findings that suggest that this disorder has the lowest prevalence rates based on combined child and parent ratings (Benjamin, Costello, & Warren, 1990). These authors used correlated parent-child ratings to obtain the prevalence rates for avoidant disorders. These correlations ranged from -.01 for avoidant symptoms in girls, compared to correlations

such as .43 for overanxious symptoms in girls, and an overall correlation of .43, based on the combined reports of parents and children cross all sub-categories of anxiety disorders. Another consideration involves the significant discrepancy between the parent's report of observed symptoms of avoidant disorder in boys (.04) versus girls (1.4). It is believed to be difficult to separate the effects of gender-based social behavior or the expectation of gender-based social behavior from the clinical symptoms of avoidant behavior in boys versus girls, based on parent ratings. The final rationale for the exclusion of avoidant disorder from my study involved the fact that a proportionately low number of subjects with prominent avoidant symptoms was noted in the sample population, based on referral. Avoidant symptoms or behaviors were noted in the sample of children carrying the diagnosis of over-anxious disorder or separation anxiety disorder, however, the full constellation of avoidant symptoms said to make up this category was rarely seen in the sample population.

Separation Anxiety Disorder (DSM III-R 309.21).

According to the DSM III-R (1987), the essential feature of separation anxiety disorder (SAD) in childhood involves excessive anxiety, in which the anxiety must be present or observed for at least a two-week period. Separation was defined as occurring in relation to those to whom the child was attached. When separating, the child may experience anxiety to the point of panic, a reaction that was clearly excessive. The reaction to separation is said to be exaggerated beyond that which would be expected for the child's developmental level.

Overanxious Disorder (DSM III-R 313.00).

According to the DSM III-R (1987), the essential features of Over-Anxious Disorder in childhood involve excessive and over-realistic anxiety or worry. The duration must be a period of at least 6 months or longer. Children with this disorder seem to be extremely self-conscious. They worry about future events, such as examinations or the possibility of injury; the inclusion in peer group activities; meeting expectations, such as deadlines; keeping appointments; and performing chores. Often these children have a preoccupation or concern about past behavior. Because of their anxieties, these children may spend an inordinate amount of time inquiring about the discomforts or dangers of a variety of situations and need a great deal of reassurance. One example provided was that upon routine visits to the doctor, the child may show a great deal of anticipated worry about minor procedures. The essential presentation of a child with over anxious disorder involves persistent worry and fear of harm befalling the child and significant others. The child appears continually distressed, wherein cognitive obsessions and fears are the primary psychological processes in which the child attempts to cope with the discomfort of subjective anxiety (DSM-III-R, 1987).

Biological and Epidemiological Factors For Childhood Anxiety

There was an increasing body of evidence that suggested the existence of a familial factor in anxiety disorders (Turner, Beidel, & Costello, 1987). Family history data and twin studies have become the primary tools used in establishing prevalence rates for anxiety disorders. The most exhaustive study to date (Torgersen, 1983) reports a higher

proband-wise concordance rate for any diagnostic category of anxiety disorder for monozygotic pairs versus dizygotic pairs. Generalized anxiety disorder did not hold true to these findings. The concordance rate for MZ twins was 34%, and 17% for DZ twins. Most interesting in this study was the finding that no MZ co-twin was found to have the same anxiety disorder as the proband. While Torgersen interpreted his results to support the genetic transmission of anxiety disorders, the data seemed to more strongly support the hereditary transmission of a generalized predisposition for developing any one of a variety of possible anxiety disorders. One could interpret this study as strong evidence for familial factors in the development of anxiety disorders, so that some individuals appear to be at greater risk for the development of maladaptive anxiety than others (Carey & Gottesman, 1981). One should interpret these findings with caution, in that it was not clear whether the familial factor was biological, environmental, or a combination of the two. One emerged with a concept of "anxiety proneness" that leads to the examination of interactive influences.

Another method in determining the contribution of heredity to the development of anxiety disorders was the study of the offspring of anxiety-disordered patients. In one study (Turner, Beidel, & Costello, 1987), researchers reported children of anxiety patients were over nine times as likely to have any DSM III disorder as the children of normal patients. The children of anxiety-disordered patients were also seven times as likely to have an anxiety disorder than the offspring of non-anxiety disordered patients. Further results indicated that children of anxiety patients were significantly more anxious with

respect to state anxiety than children of normal parents or normal grade school children. State anxiety was defined as stress-related to current or transient environmental factors, or the propensity to react to stress in an anxious way (Turner, Beidel, & Costello, 1987). Trait anxiety, on the other hand, was defined by these authors as an indicator of anxiety-proneness or a predisposition to respond with anxiety. The offspring of anxiety patients showed significantly more trait anxiety than normal school children. Children of anxiety disordered parents displayed significantly higher scores related to emotional distress and poor social adjustment across nine different adjustment areas. These children also showed more specific fears, difficulties at school, worries about family members and themselves, depressed and anxious mood states, somatic complaints, time spent in solitary activities, fewer friends, episodes of confused thinking, and higher overall maladjustment scores. Self-report data also demonstrated that there were, in fact, risk factors that were significantly higher for children with anxiety disordered parents versus children of normal parents. These authors also raised the interesting proposal that their findings might not be an indication of a predisposition to anxiety but merely a reaction to life's circumstances. Observational learning has been shown to be a powerful mechanism in the transmission of fear and anxiety (Mineka, et al., 1985). Here, the implication is that children of anxiety-disordered individuals may be modeling, learning or responding to the anxieties of their parent, in addition to the influences of biologically transmitted felt anxieties.

In evaluating the prevalence rates of anxiety disorders in children from the general population, it was essential to first examine the validity and reliability of the informant's

self-report. Most researchers agree that there was little agreement between child and parent reports of prevalence rates of childhood anxiety disorders (Costello, 1989; Kashani & Orvaschel, 1990). In studies that utilized both child and parent reports, the prevalence rates were higher when a composite of both child and parent ratings were obtained (Bernstein & Borchardt, 1991). Structured interviews utilizing DSM III-R diagnostic criteria were noted by these authors to be the primary assessment tool of choice. These authors also reported that when the functional impairment was excluded from the assessment criteria (e.g., simple phobia), the prevalence rates for anxiety disorders also decreased.

Two classic studies investigated rates of anxiety disorders in children (Anderson, et al., 1987; Costello, 1989). Anderson and his colleagues evaluated almost 800 11-year-Olds in New Zealand, and found the following rates: 3.5% having separation anxiety disorder, 2.9% with overanxious disorder, 2.4% with simple phobia and 1.0% with social phobia. Costello reported an overall rate of 8.9% in a sample of almost 800 pediatric patients, ages 7-11, who met the criteria for at least one anxiety disorder. This included 4.1% with separation anxiety disorder, 4.6% with overanxious disorder, 9.2% having simple phobia, and 1.0% with agoraphobia.

Epidemiological Factors In Separation Anxiety Disorder

Most researchers were very quick to point out that separation anxiety disorder involves separation reactions on the part of disordered children that are extreme, beyond that expected of the child's developmental level (Bernstein & Borchardt, 1991).

Separation reactions were said to be normal developmental phenomena from approximately age seven months to the early preschool years. These authors suggested that separation anxiety disorder was probably the most common of the childhood anxiety disorders. The prevalence rate of separation anxiety disorder was lower in adolescents (Kashani & Orvaschel, 1988, 1990) than in children. The adolescents with this disorder usually manifested school refusal and somatic complaints. The mean age of presentation to a clinic setting of children with separation anxiety disorder was reported to be 9.1 years, where as the mean age of presentation of children with overanxious disorder was said to be 13.4 years (Last, et al., 1987). This same study showed a predominance of female and Caucasian children from lower socioeconomic families.

Some developmental differences in the expression of separation anxiety disorder have been noted (Francis, et al., 1987). In the study of 45 adolescents with separation anxiety disorder, no differences between the responses of boys and girls to the basic criteria were noted. However, there were differences between age groups in terms of the criteria that were most frequently endorsed. Young children (ages 5 to 8), were most likely to report worries about realistic harm to attachment figures, and school refusal. Children, ages 9 to 12, more frequently reported excessive distress at times of separation. Adolescents, ages 13 to 16, most frequently reported school refusal and physical complaints. Nightmares about separation were commonly described by younger children but rarely reported by subjects ages 9 to 16. It appears that the younger the child, the larger the endorsement of symptoms. Differences in the types of fears endorsed by

children with separation anxiety disorder versus other anxiety disorders were noted (Last, et al., 1989), using the Fear Survey Schedule for Children-Revised (FSSC-R) (Ollendick, 1983). Children with separation anxiety disorder most commonly endorsed the fear of getting lost. They also reported fears of germs, illness, and other objects. Overanxious children, on the other hand, most often reported social and performance concerns. It was noted that the fears expressed by children with separation and overanxious disorder were not generally reported by children in the general population. These children also reported a higher incidence of fears related to physical symptoms.

By comparison, my study involved ten subjects, six boys and four girls. The mean age for my sample is 8 years: 9 years for girls and 7.3 years for boys. Previous studies (Last, et al., 1987) report a higher mean age for children with OAD, otherwise children in my study compare closely on all symptom characteristics. Since my study included one twelve-year-old girl, comparison to previous studies involving adolescents is not possible.

Some studies suggested that there was a rather high remission rate wherein the disorder seems to disappear for a period of time and perhaps reemerges in later adulthood (Cantwell & Baker, 1989). Nine children with an average age of 3.6 years who were initially diagnosed with separation anxiety showed a recovery rate of 44% four years after initial evaluation. It was suggested that possibly these children were mis-diagnosed as demonstrating a separation anxiety disorder, when in fact their presentation was actually characteristic of separation anxiety in its normal developmental form. Many adults with agoraphobia report histories of separation anxiety disorder as children (Berg, et al., 1974).

It should be noted, however, that these authors suggest that there were no longitudinal studies that clearly demonstrated an extension from childhood into adulthood compared to retrospective reports taken from adults with agoraphobia.

The Epidemiology Of Overanxious Disorder In Childhood

The hallmark feature of overanxious disorder in childhood was the absence of a specific object or situation that can be linked to the occurrence of excessive anxiety. The essential feature of this disorder was that these children worry excessively. Demographic characteristics of these children suggest that they have an older age of presentation than children with separation anxiety disorder (Last, et al., 1987). There was an over-representation of children from middle- and upper-class families who demonstrated overanxious disorder. In contrast to separation anxiety disorder, older children and adolescents with overanxious disorder endorsed significantly more symptoms than younger children (McGee, et al., 1990; Strauss, et al., 1988). When children were divided into two age-cohorts, (ages 5 to 11 and ages 12 to 19), 60% of the older children reported greater than five symptoms, compared with 35% of the younger group. The symptom of worry about past behavior was significantly more common in the older children. Co-morbid diagnoses included attention deficit hyperactivity disorder (35%), and separation anxiety disorder (70%) in the younger children. Simple phobia was noted in 41% and major depressive episode in 47% of the older group. The older group also demonstrated elevated scores on measures of manifest anxiety and depression. This finding was not indicative of younger children in the sample. It appeared that overanxious disorder

symptoms were common in children in the general population (Achenbach, et al., 1989; Bell-Dolan, et al., 1990).

In terms of stability of the disorder over time, eight children with an average age of 7.3 years demonstrated a recovery rate of 25% after a four-year follow-up, the lowest recovery rate noted for childhood anxiety disorders (Cantwell & Baker, 1989). There was some disagreement concerning age specific rates of overanxious disorder in childhood. Some studies showed a decline in adolescence (Velez, et al., 1989) while others showed the frequency was low until adolescence. There was marked increase followed by a continued slower increase over time (Bowen, et al., 1990; Kashani & Orvaschel, 1988). In terms of the range in severity, OAD was apparently disabling in at least 50% of those who suffer from the disorder (Last, 1989). In some cases, the severity of the disorder reaches proportions significant enough to require hospitalization (Livingston, et al., 1985; Werry, et al., 1983).

With respect to chronicity, or its developmental continuation into adulthood, one study (Tyer, et al., 1985) demonstrated that adults suffering from generalized anxiety disorder, often considered the closest adult equivalent to OAD, experienced the onset of their disorder in childhood or adolescence in only twenty percent of the cases. The authors concluded that OAD could not be a major contributor in the development of generalized anxiety disorder in adults. Other disorders, such as obsessive compulsive disorder and phobias, had a much higher frequency of childhood onset. There was some speculation as to whether OAD underwent a latent period in that it often seemed to

disappear within two years of onset. The underlying disorder may therefore reemerge in adulthood as another separate clinical entity. It was also suggested that the remission rate of this disorder may be higher in boys than in girls, due to the predominance of adolescent females with the disorder.

Co-Morbidity Studies

In a review of co-morbidity research, Bernstein and Borchardt (1989) suggested that separation anxiety disorder was the most common anxiety disorder associated with depression. These authors estimated that 28% of the patients with anxiety disorder showed significant symptoms of major depression. Review of prevalence studies suggested that this rate varies from 28% to 47%. The authors also suggested that children with concurrent anxiety and depressive disorders were significantly older at presentation than those with anxiety disorders alone. It was also noted that the co-morbidity of anxiety and depressive disorders in children and adolescents was associated with an increase in severity of both disorders. There were findings that suggested that psychopathology and poor physical health were significantly more common in mothers with children with co-morbid anxiety and depressive disorders, compared with mothers with children with depression alone.

There was also an association between anxiety disorders and attention-deficit hyperactivity disorder (Anderson, et al., 1987). Children and adolescents with primarily overanxious disorder were more likely to have another disorder, especially simple phobia, panic disorder, social phobia, or avoidant disorder, as compared to children with primary

separation anxiety disorder. Approximately one-third of the children with a primary diagnosis of separation anxiety disorder had a concurrent diagnosis of overanxious disorder (Last, et al., 1987). In these studies, the primary diagnosis was defined as a disorder causing the greatest functional impairment in the clinical situation under investigation. One could conclude from these studies that having one type of anxiety serves as a risk for other types of anxiety. Different types of anxiety appeared to have the same underlying pathogenesis or non-specific risk factors. There seemed to be a great deal of symptom overlap between anxiety disorders, as well as the occurrence of clusters of symptoms from diverse anxiety disorders. These authors also seemed to agree on what was defined as the "unitary model". The unitary advances the hypotheses that the comorbidity of anxiety and depressive disorders was on a continuum that represents different manifestations of the same underlying abnormality.

Risk Factors

While the cause of childhood anxiety disorders is still poorly understood, there are some known risk factors related to the disorders. Environmental stress appeared to be associated with the manifestation of anxiety symptoms. Children with anxiety disorders reported a higher number of environmental stressors as measured by questionnaires than did children with no history of anxiety disorder (Kashani & Orvaschel, 1990). Familial patterns also seemed to represent risk factors associated with the manifestation of these disorders. Elevated rates of separation anxiety disorder were found to be prevalent in children of mothers with major depression plus panic disorder or agoraphobia, as

compared to children of normals, or as compared with children of mothers with major depression only (Weissman, et al., 1984). In one study (Kagan, et al., 1984), children of adults with panic disorder or agoraphobia were more likely to have a behavioral inhibition to the unfamiliar than were the offspring of the parents without these anxiety disorders. A higher prevalence rate of overanxious disorder in childhood (42%) was reported by mothers of children with overanxious disorder compared with the other two groups of mothers. However, the mothers of children with separation anxiety disorder did not show a higher rate of separation anxiety disorder by history than the other two groups (Last, et al., 1987). Maternal separation anxiety was related to Maternal Depression, maternal over-protection and consequent attachment dysfunction (Hock & Schirtzinger, 1992). Parental stress, as measured by questionnaires, was said to be correlated positively with the existence of OAD in children (Costello, 1989). The presence of parental psychiatric disorder in complications during pregnancy was also said to be related to the occurrence of OAD (Velez, et al., 1989).

In evaluating familial patterns, OAD was linked to psychiatric disorder in parents, primarily involving a preponderance of anxiety disorders (Last, et al., 1987). More severe cases of OAD in childhood were said to be linked to parental mood and alcohol disorders (Livingston, et al., 1988). In one study, findings suggested that mothers of children with OAD had an increased history of OAD as children themselves, although the frequency was under 40% (Last, et al., 1987). While generalized anxiety disorder was targeted as more common in parents of children of OAD than those of normal children, no study has shown

a specific or continuous relationship between OAD and parental generalized anxiety disorder as compared to other anxiety disorders.

Familial Factors

A number of earlier studies suggested a preponderance of isolated familial variables and parental characteristics that may be associated with the onset of certain anxiety disorders in children. For example, Jenkins (1968) found that mothers of overanxious children were more likely than mothers of other clinical children to be described in case notes as having an infantilizing, overprotective attitude, as setting an example for the child's pathology, and as sometimes having a marked preference for the child relative to other siblings. The parents of overanxious children were also less likely to use physical punishment than parents of the average clinic child. Historical clinical reports in case studies have long documented the relationship between the over-protective parent and the development of "phobic anxiety" in children (Eisenburg, 1958; Waldfogel, 1957). In reference to the familial factors that may be associated with separation anxiety, Morris (1981), found that infants who were insecurely attached seemed to have mothers who had a history of disturbed relationships in their own family of origin, particularly with their fathers. This study supported the view that there was an inter-generational transmission of the forms family relationships may take. It was conceivable, however, that parents rewrote their histories when faced with a difficult child or difficult child-parent relationship.

The work of Mahler and colleagues (1975) provided a theoretical framework for the development of anxiety in the child, based on the maternal-child dyad. According to Mahler, the mother's ability to maintain a distinction between the child's needs and her own provided a basis for committing the child to differentiate him/herself further in both cognitive and affective domains (Greenberg & Speltz, 1988). A symbiotic relationship between mother and infant was considered normal; however, prolonging the symbiotic closeness beyond infancy prohibits differentiation and was a precursor of dysfunctional relationship processes. Extremely high levels of maternal separation anxiety, with its organizing influence, may interfere with the child's individuation by virtue of the mother's inability to "let go" of the child in age-appropriate ways. In addition, the increased depressive symptomology may develop in a highly anxious mother when the child begins to move further away to attend school or engage in other culture-specific autonomous behaviors. In such cases, the mother is left with a depleted sense of self and corresponding sense of loss.

Clinical Literature Related To The Topic

Pharmacological treatments.

Few studies utilized double-blind, placebo-controlled pharmacological treatment of anxiety disorders in children. In these studies, sample sizes were noted to be small and results inconclusive. One study utilized 35 subjects, 6 to 14 years of age, with separation anxiety disorder. These children were treated with Imipramine at a dosage of 100 to 200 mg per day or a placebo (Gittleman-Klein & Klein, 1971, 1973). In this study, children receiving Imipramine were significantly more successful in returning to school than those receiving placebos. Children in the drug treatment group also experienced a significant improvement in symptoms.

Bernstein and Borchardt (1991) compared Imipramine to Alprazolam; however, no significant differences between active medications and placebos were noted. This study included 24 subjects, ages 7-17. Imipramine dosages ranged from 150 to 200 mg a day with plasma levels monitored. Alprazolam dosages were 1.0 to 3.0 mgs. a day. Related medications such as Calonazepam demonstrated beneficial results in two case studies involving the treatment of separation anxiety disorder, and one case study of overanxious disorder (Biederman, 1987).

In a clinical review of psychopharmacological treatments of anxiety disorders in children and adolescents, Bernstein and Borchardt (1991) assert that overall, there were a few small and diverse studies indicating that the beneficial use of benzodiazepines (minor tranquilizers) and tricyclic anti-depressants was helpful in the treatment of anxiety

symptoms in children. Overall, however, there was a glaring absence of pharmacological studies of anxiety disorders in children and adolescents. The lack of systematic, placebo-controlled studies of medications was surprising, considering that these disorders are of epidemic proportions in our society.

The exact mechanism of action for these medications is not known; however, it is believed that medications such as Clomipramine are inhibitors of Serotonin re-uptake (Insel, 1990). The efficacy of Clomipramine and similarly-acting medications is likely achieved through mediation of the serotonin system. Improvement in patients on Clomipramine has been correlated with reduction to platelet serotonin levels during treatment (Filament, et al., 1987). Most researchers call for more thorough investigations of the physiological and biological correlates in childhood anxiety disorders. There appears to be no conclusive evidence that has yet been established for the use of medication in children or adolescents with over-anxious or avoidant disorders (Mattison, 1989). Mattison also points out that school phobia has become the contemporary focus of research efforts due to the specificity of the symptoms, and the fact that fears are considered measurable and therefore may be operationally defined.

Research in the field of pharmacological treatments is characterized by case studies using open field trial methodologies. For example, Simeon & Ferguson (1987) indicated that Alprazolam was considered safe and effective in treating children with avoidant and overanxious disorder. Significant clinical, global, and symptomatic improvement was noted in this particular study. Closer inspection of this research revealed three of the

patients were maintained on a daily dose of 1.5 mg; one patient on 1.25 mg per day; three patients on 3.00 mg per day; four on .7 mg; and one on .50 mgs. The study was composed of 12 white children (10 boys and 2 girls). The children and adolescents were 6-18 years of age, with a mean age of 11.5 years. All subjects were diagnosed as overanxious disorder or avoidant disorder. There were different levels of severity noted in the symptoms in these children prior to the study. The authors concluded that non-specific, global improvement was noted in one patient, improvement was moderate in six, and improvement was mild in four. One case was assessed at demonstrating no improvement. The follow-up in this study revealed that one week prior to treatment in a post-drug placebo trial, two children improved further, while four relapsed. After four weeks, five patients had relapsed and four were re-treated with the medication. This study could be considered indicative of research in the field, wherein it was difficult to ascertain the specific clinical benefits, considering all the uncontrolled variables in the treatment approach. It was also significant to note the rate of relapse in consideration that psychotherapy was not provided in this study. The authors call for a wider research framework utilizing a qualitative assessment of anxiety states and symptoms in children that was "urgently needed".

Pharmacological mechanisms of action of tricyclics.

Tricyclic antidepressants (TCA) were introduced in the late 1950's and have proven to be among the most revolutionary drugs in medicine, according to Alexandria Glassman, M.D. (Nelson, 1991). Many of the compounds are chemically similar, and the

group as a whole has been clinically effective. A shared characteristic of TCA's is the fact that they are highly lipid-soluble, a characteristic that allows them to cross the blood-brain barrier into the brain. However, the same characteristics that allow the drug to penetrate the brain make it very dependant upon metabolism to leave the body. Consequently, metabolism rates vary substantially between individuals, according to such factors as individual body weight and age, as well as metabolic differences.

It was interesting to note that while Nelson advanced the most recent theory involving anti-depressant mechanisms of action, there was no reference in his article as to the direct application of tricyclics to anxiety disorders in children. Featured in the article were sections that dealt with strategies for: Rapid treatment of severe depression, use of tricyclics in geriatric depression, the use of tricyclics in treatment of panic attacks, the use of tricyclics in the treatment of eating disorders, and the use of tricyclics in the management of cocaine abstinence. Of particular note was the obvious absence of the clinical application of tricyclic medications in the treatment of childhood anxiety disorders. Once again, this conspicuous absence speaks to the manner in which research into the area of childhood anxiety disorders from a pharmacological perspective has been all but ignored.

The traditional and most widely accepted theory as to the effective mechanism of action involved in tricyclic anti-depressants has recently come under critical scrutiny. The original hypothesis suggested that tricyclic antidepressants block the re-uptake of monoamines which function as a neurotransmitter substance in the serotonergic system of

the brain. As Nelson (1991) demonstrates, new evidence suggested that this theory has been disproved by the discovery that antidepressants with low as well as high potency in blocking serotonin can be equally effective in the treatment of major depression. In addition, drugs that block the re-uptake of norepinephrine are also known to be effective, as are drugs such as bupropion, a drug whose mechanism of action was unknown. Nelson's model, recently advanced, suggested that anti-depressant treatment enhances serotonin transmission through changes in different receptor systems rather than through the blockage of serotonin re-uptake. Nelson advanced the theory that some antidepressants, such as tricyclics, enhance serotonin function by sensitizing the post-synaptic neurons to serotonin. This sensitizing effect is said to enhance the effectiveness of neurosynaptic transmission. Increased neuro-transmission through the serotonin system occurs in areas such as the cerebral cortex, thalamus, hypothalamus, and hippocampus. As one proof of this theory, Nelson noted that after the administration of an amino acid drink, containing no tryptophan, tryptophan levels were lowered up to 90%. A relapse in depressive symptoms occurs in approximately 60% of the remitted depressed patients who received the drink while maintained on anti-depressants. The conclusion was that some anti-depressant treatments seem to rely on the integrity of the serotonin system to maintain the anti-depressant response.

Psychotherapeutic treatment of childhood anxiety disorder.

In examining the field of pediatric behavioral medicine, Mattison (1989) reviewed the relevant research on the psychotherapeutic treatment of childhood anxiety disorders.

Results indicated that in contrast to pharmacotherapy, more research has been conducted in the cognitive behavioral treatment area. Several forms of the cognitive/behavioral therapy included active and direct behavioral intervention with children and teaching cognitive self-management techniques. The most common focus in the literature involved investigation of fears and phobias, due to the ways in which one can obtain an operational definition of the feared object or situation. Researchers have also considered school phobia, shyness and social withdrawal, as well as obsessive-compulsive illness.

Approaches such as systematic desensitization, flooding, contingency management, and modeling appeared to have gained popularity in recent years. However, Mattison (1989) notes that reviewers have criticized previous research for being primarily limited to laboratory studies of mildly to moderately fearful children rather than actual severe clinical cases. Furthermore, he indicated that successful outcome was difficult to measure and should involve better and more comprehensive measurement techniques. Once again, Mattison notes that treatment outcome effectiveness was by no means clear and demonstrative for procedures such as psychoanalytic therapy and experimental paradigms that take place in laboratory settings.

In an extensive review of cognitive behavioral treatment strategies with anxious children, Kendall and associates (1988) reported that primarily all studies conducted with anxious children focused on fears, such as nighttime fears, fear of dental and medical procedures, school phobia, evaluation anxiety, and fear of strangers. In addition, research studies as of 1988 all seemed to contain the common theme and method of operation

involving cognitive self-talk, and teaching the child cognitive strategies for mediating cognition surrounding fear.

It is my opinion, that while cognitive/behavioral treatments appeared to be the most promising, the validity of outcome statistics was tenuous due to extreme variations in the forms of family relationships and interactions that have been used to teach self-management skills to children. Therefore, one cannot be sure how to interpret outcome statistics when the method of operation for the therapy was so variable in terms of the level of family involvement.

Behavioral treatment.

According to Strauss (1988), in spite of the high referral rate of children and adolescents with overanxious disorder for outpatient services, virtually no studies were published concerning effective behavioral treatment for children or adolescents with overanxious disorders, as of 1988. The typical behavior therapy package used with children often incorporated the following approaches: Relaxation techniques including muscle relaxation and visual imagery of pleasant scenes; positive self-statements; home-based token programs used to reward daily practice of skills learned and not anxious behavior; and cognitive control, in which children and adolescents learned to evoke anxiety-provoking images and subsequently to engage in coping strategies to achieve relaxation. According to Strauss (1988), there was evidence through case studies that muscle relaxation techniques combined with cognitive techniques was helpful in alleviating overanxious symptoms in children.

Additional Areas Of Related Clinical Research

Peer and social status of children with anxiety disorders was a relevant field of study, in that it provided an alternative viewpoint for evaluating the extent to which anxiety-disordered children may be impaired in the area of social functioning. Strauss and associates (1988) evaluated the socio-metric status of children with anxiety disorders and concluded that anxiety-disordered and major-depressive- disordered children showed impaired peer relations relative to non-clinic children. Anxiety-disordered children were on par with conduct-disordered children in receiving significantly less-positive peer

nominations compared to non-disordered classmates. Conduct-disordered children did receive a higher level of negative nominations than did anxiety-disordered children. Children with anxiety disorders seem to be socially neglected by their classmates, and they received low social impact scores, low social preference scores and higher scores on patterns of socially isolative behavior. It was felt that anxiety/withdrawal may be correlated with being actively disliked by peers and with peer rejection, which in turn leads to social isolation and disturbed socio-metric status. While the authors noted that concurrent depression was not completely ruled out in the sample of anxious children, high natural co-morbidity rates tend to suggest that the pure overanxious disorder may be an unrealistic construct.

Studies of psychophysiological vulnerability.

A relatively new area of research into the etiology of anxiety disorders involves psycho-physiological vulnerability studies. Often conducted in laboratory settings, the goal of the psycho-physiological study was to delineate differences in nervous system responsiveness and autonomic reactivity in the face of environmental stimuli. According to Turner, Beidel, and Epstein (1991), based on family and twin studies, it appeared that the anxiety disorders of childhood were familial, but the nature of the familial factor was uncertain. These authors compared the psychological characteristics of anxious versus normal children and found that anxious children differed significantly from normals in myographic muscle tension and the number of spontaneous fluctuations. This measure was considered to be highly sensitive as a measure of autonomic arousal. While anxious

children did not differ significantly in their self-reported anxiety and fear, they were higher on measures of autonomic indicators and emotional arousal. In presenting anxious and non-anxious children with fear and anxiety provoking stimuli, the anxious children produced greater responsiveness than did normals. Measurement of facial tension, galvanic skin response, EMG (electromyographic) and heart rate responses in anxious children demonstrated a shorter latency to respond to the stimuli and a tendency to require longer periods to recover to baseline levels. In addition, levels of all autonomic indicators were higher in anxiety- disordered children. Most significant in this study were the data that indicated that anxious children did not perceive themselves to be aroused even though the psychological responses indicated that they were. One interpretation for this data would be that high levels of autonomic arousal in these children were perceived as their normal level of responsiveness or "the way they have always felt". This would indicate why the children did not report feeling fearful or anxious in that they perceived their internal state as typical, although in comparison with normal children, the autonomic levels of anxious children were clearly elevated.

Werry and associates, (1987) compared ADHD, anxiety-disordered, and conduct-disordered children with matched normal controls on multi-laboratory measures. Measures included impulsivity, arousal, motor performance, activity level, and cognition. These researchers found that anxiety- disordered children did not differ from their controls in arousal, although anxiety-disordered children were slightly older and more likely to be female than children from the other samples. When Werry controlled for age, sex, and

verbal IQ effects, most differences between anxious and normal children seemed to "disappear".

Chapter 3

Methodology

Methodological Map

Psychotherapy chart notes were initially used as a guide for constructing topical departures, elaborations, and probes in the semi-structured interview. Detailed notes on videotape records were utilized to document the semi-structured interviews. These notes and videotaped records were reviewed extensively in order to guide and refine the data collection process. Following the data collection process, notes and video records were reviewed further in order to extract, sort, and categorize data in a meaningful way.

Additional data regarding indications of post-treatment recovery were obtained from the Pediatric physicians, following the interview process. Finally, the Wilcoxon Matched Pairs Test was utilized to evaluate the mothers' ratings of pre- versus post-treatment symptom levels in the child. Mothers' quantitative symptom ratings were obtained in the course of the semi-structured interview. Mothers' ratings of pre-and post-symptoms were obtained using DSM III criteria of O.A.D. and S.A.D. (See Appendix E). Mothers were asked to rate the presence and frequency OAD and SAD symptoms on a scale from zero to three (0-3), or No Symptom = 0, Mild = 1, Moderate = 2, and Severe = 3. Ratings were obtained for pre-and post-treatment status. Participants were contacted by telephone if further elaboration was needed. (See Appendix I for a detailed methodology flow chart.)

Overview

The purpose of the study was to utilize clinical observations and parental perceptions to describe and evaluate a specific combination of clinical therapies in the treatment of childhood anxiety disorders. Procedures that were utilized in the investigation and documentation of this research are described in this chapter.

Sample Description

The sample consisted of ten children and their parents that I had treated utilizing a multi-modal treatment regime. Children in the age range of five to twelve years were selected. All children were initially referred by pediatric physicians for the treatment of childhood anxiety disorders. The sex of the subject was not used as a selection criterion. All subjects had no prior history of psychiatric or psychotherapeutic treatment. Population demographics involved in medical referral of a patient to a private practice clinician are strongly biased in the direction of middle and upper-middle class socio-economic status. All subjects received treatments prior to the initiation of post-clinical investigations. Evaluation of treatment outcome was based upon several sources, including: Review of medical records, child and parental reports, researcher observations. The tabular description of the participant family demographics and sample description is provided in "Appendix C".

Sample Selection Process

The patient population was provided by way of unsolicited referrals by pediatric physicians. By virtue of the referral as a naturalistic selection process, the children in this

study presented as carrying the diagnosis or suspicion of childhood anxiety disorder. The period of time that transpired between the subjects' completion of therapy and the beginning of post-clinical interviews was from one year to one week. A sample of ten cases was selected from the population of all subjects that had successfully completed treatment. Sample selection was based upon an effort to choose those cases that were most representative of the childhood disorders under study as well as the typical course of therapy. Based upon subject availability, an effort was made to select and compare subjects on the basis of the length of time that transpired between the completion of treatment and the initiation of follow-up interviews. This technique provided valuable information regarding both the viability and the reliability of treatment methods over time, as well as indications of relapse in the sample population.

Data Collection Procedures

The primary instrument used in this study consisted of the in-depth interview (Taylor & Bogdan, 1984). The interviews were conducted with the child subjects and their parents, separately. The collection of relevant demographic, developmental and family clinical data provided the context for evaluating treatment effectiveness. Interviews were organized around specific research areas, utilized a semi-structured format, and included components of a clinical history of the subject as well as clinical history the subject's nuclear and extended family.

Clinical and developmental histories of the subject and the subject's nuclear and extended families were obtained in order to better ascertain bio-social influences in the

inter-generational transmission of childhood anxiety disorders (see Appendix A). Follow-up interviews were conducted in order to secure missing data and to enhance elaboration. Interviews utilized questions organized around the client's cognitive, affective and behavioral responses to pretreatment, treatment, and post-treatment functioning. The T-F-A (think, feel, act) information technologies of Hutchins and Cole provided the model for analysis of the informant responses (Hutchins & Cole, 1992).

Responses to questions pertaining to thoughts (T), feelings (F) and actions (A) were encoded as follows: The participant was questioned as to whether a given response was a thought, feeling, or action. Participants were encouraged to discriminate among the three categories T, F, and A through clarifying, elaborating, comparing, and contrasting responses. On each of the three sides of a triad, participants were asked to differentiate feelings versus thoughts, thoughts versus actions, and actions versus feelings, through elaborations such as the following example: “Is that more a thought or a feeling? If fear was the feeling, what did you think? You thought your mom may leave you? Between the thought and the feeling, did you have more of the thought, more of the feeling, or about the in-between?”

Once a participant's responses were encoded, a composite triad was constructed for each question across participants. Each of these triads were analyzed utilizing crosschecks, review, classification, and re-classification to render an overall triad configuration that was representative of the anxiety-based parent/child interactions in this sample.

Participants were guided through a process of evaluation, differentiation and identification of thought, feeling, and action response content. This process allowed participants to define and convey the contextual meaning of their responses. The response was encoded when it appeared to clearly represent an affective, rational or behavioral response, respectively. A response was defined as an action (A) if the response denoted or implied a physical action or movement, including approach and avoidance behaviors. A response was defined as a thought (T) if the response denoted a thinking process (whether rational or not), a primarily cognitive or cerebral experience, such as an opinion or perspective. A response was defined as a feeling (F) if the response denoted a predominantly affective response, involving feeling or visceral responses. Feeling responses were seen as emotional, subjective and variable in their intensity.

The mother and child dyads were considered primary respondents and they were interviewed separately using the semi-structured interview format. Interviews lasted approximately two hours and were conducted at the researcher's outpatient office. This office was also the site of all therapeutic interventions.

A specific format was utilized as a guide for all semi-structured interviews (see Appendix B). Interviews involved four phases: Warm-up, rapport-building, building dialogue, and descriptive questioning. "Probing" was utilized as an interview technique for the purposes of elaboration, specificity and clarification of meaning (Taylor and Bogdan, 1984).

Detailed journal notes were taken throughout the interview process, as well as immediately following incidental and phone contacts. This technique provided the researcher an opportunity to note problems, ideas, and perceptions as well as serve as a guide for future areas of inquiry. All interviews were videotaped with the respondents' permission. Videotapes were reviewed no less than four times in order to reach saturation or the point of maximum discovery of meaning. Notes were taken on recorded data, across the prospective topic areas.

Finally, a thorough examination of each client's chart was undertaken in order to establish a historical base-line. Each client's pre-treatment status in terms of the overall clinical presentation was documented for comparison purposes. The client's chart also provided verification as to the specificity and standardization of the pharmacologic and psychotherapeutic treatment regimens. In addition, the client's chart provided documentation as to the client/family initial response to treatment. Post-treatment interviews provided a developmental perspective as to the treatment effects over time (Rutter, 1989). The subjects' medical records were obtained in order to secure estimates of the pediatrician's perception of the child's recovery, as well as to provide a record of medications prescribed. The respondents were informed of the nature of the interview by topic area and asked to think about their responses prior to the initiation of the interview process.

Consent forms describing the nature of the research were obtained from each adult participant prior to conducting interviews (see Appendix D). These forms outlined

expectations regarding the respondents' participation, as well as ensuring the subjects' confidentiality.

Data Analysis

The data analysis of this study involved three general phases as outlined by Taylor and Bogdan (1984). The initial phase involved "ongoing discovery", which entailed identifying themes, concepts, and propositions. The second phase followed the data collection and involved coding and classifying the data, as well as developing an expanded understanding of the research matter. In the third phase, the researcher endeavored to "understand the data in the context in which they were collected" (Taylor & Bogdan, 1984, p. 130). All the data were extracted from journal entries, video tape observations, and final questionnaires.

I elected to utilize specific quantitative methods in the data analysis process as a means of establishing a quantitative outcome measure. A synthesis of the literature review, this theoretical framework, and the collected data provided the context for the emergence of the final analysis.

Methodological Limitations

There were certain methodological limitations that were inherent in this qualitative clinical research. One obvious limitation involved the dual role of clinician/researcher. One could argue that as a researcher, objectivity would be lost by virtue of the fact that the researcher has participated in the study and was an integral part of that which he was studying. It should be noted, however, that in keeping with traditions of anthropological

and ethnographic psychological research, the goal of this qualitative analysis would be to gain a depth of understanding and richness of data at the expense of losing some researcher objectivity. It should also be noted that prior to conceptualizing this project as a researcher, I was engaged in the role of clinician and administered therapy to all participants. In almost all cases, the therapeutic interventions were provided prior to the conceptualization of this research study.

A second limitation involved the issue of utilizing the historical versus concurrent format. Follow-up interviews conducted with subjects that had previously received treatment presented the risk of losing substance data as a result of the passage of time and the deterioration of the subject's memories of clinical events. Distortions of memory may result from factors that may have arbitrarily affected the subject's status since the conclusion of the clinical therapies (Houston & Robins, 1982). Research that runs concurrent with clinical treatment is, on the other hand, not as susceptible to deterioration of the subject's memory over time or the effects of intervening variables. The historical context does, however, provide an essential perspective on the reliability of treatment over time as well as an opportunity to study relapse rates of subjects. In addition, the developmental perspective of change over time is also a valuable derivative of the historical perspective.

A third limitation involved reliance on subject's self-report. One could argue that the self-report of parents and child subjects was prone to be effected by any number of

psychological distortions (Houston & Robins, 1982). One should consider however, that as an object of study, anxiety and the measurement of anxiety was a subjective and individualized experience. The researcher must, by any account, rely upon observation and self-report from the subject's own frame of reference.

A fourth limitation involved the issue of impression management. It could be said that clients and research subjects may be invested in providing the researcher or the clinician with the impression of the most favorable outcome. This limitation has been addressed, at least in part, by attempting to utilize multiple sources and informants in order to verify the actual level of clinical effectiveness.

A fifth limitation involved the use of a relatively small sample size. In keeping with the qualitative research model (Taylor & Bogdan, 1984), qualitative analysis seeks to surrender the advantages of large population estimates as well as the need to generalize research results to the general population. Rather, qualitative research seeks to secure a deeper understanding and richness of data that was available only by way of the researcher's efforts to immerse him or herself in the subject's subjective experience. Interaction occurs on a human level to obtain a broader sample of data from each subject.

The sixth limitation involved observer bias. To this extent, it becomes essential that I make every effort to be aware of not only clinical but research biases that may compromise and distort the essential meaning of the data. By utilizing the self-exploratory process (Taylor & Bogdan, 1984), biases may be transformed into propositions or conceptualizations that will further enhance and guide the research.

Methodological Delimitation

The primary delimitation or advantage of engaging in a study of this nature involved evidence that was previously cited suggesting that the experimental method has been "prohibitive" and ineffectual in the study of anxiety disorders in children. For example, when research and clinical intervention runs concurrently, subjects are aware of "being studied", which in and of itself may be sufficient to contaminate a pure or naturalistic response to treatment. Other limitations, such as withholding treatments to subjects in control groups, are also not considered generally feasible in a clinical population of children whose parents are seeking immediate remedies. In sacrificing a narrow and tightly defined experimental focus, quantitative entities, such as the level of anxiety or degree of treatment effectiveness, were sacrificed along with implications of generalizing to the population at large. What was gained, on the other hand, was a study that provided the first comprehensive and in-depth account of overanxious disorder and separation anxiety disorder in childhood from the perspectives of the child, family, clinician and pediatrician. Additionally, the interactions of pharmacological and psychotherapeutic treatments were also provided by way of the respondents' phenomenological perspective. By all accounts, such a comprehensive effort at presenting a specific disorder and the effects of multiple treatments for this disorder was not previously available in the field of childhood anxiety disorders.

Psychotherapeutic Methodology

In this section, I structured the content and process of the psychotherapy model utilized in this research study. This model could best be described as a multi-modal system incorporating an eclectic combination of educational, T-F-A and Bowenian approaches. This model utilized Skinner (1953, 1957), Bandura (1969, 1971, 1978, and 1981), and Meichenbaum (1979, 1980). In addition to the eclectic mixture of cognitive-behavioral and family systems models previously mentioned, there were numerous stylistic and subjective aspects of the psychotherapy process that did not easily lend themselves to quantification. Regarding the stylistic aspects of the psychotherapy model utilized here, I have made every effort to describe these factors in order to facilitate replication of this psychotherapy methodology.

The Psychotherapy Process and Strategies

All subjects that were seen for psychotherapy in this study were referred by pediatric physicians. On referral, it was determined that in all cases, the pediatric physician identified probable anxiety factors that were interfering with the child's and family's functioning at the time of referral. The first contact from my office with the referred parents involved the identification of the presenting problem along with the collection of basic demographic information, such as the dates of birth, age of the child, the family's phone number and physical address. Appointment dates, fees for service and other essential information were also provided with the initial phone contact. It was

significant to note that there was no case to which referred family's did not attend the first session in a timely manner.

Upon arrival at my office location, the parent or parents were requested to provide demographic information and introductions between me, the parents and children were undertaken. It should also be noted here that primarily the parent in attendance throughout the psychotherapy process was the biological mother. It was also significant to note that, based on data collected in this study, in every case the biological mother demonstrated a known history of anxiety in herself or her family ancestry. In every case, I attempted to approach the parent first by way of introduction and then requested that the parent introduce me to the identified child patient and/or their siblings. It should also be noted here that often I would observe extremely timid, passive, anxious or agitated behavior on the part of the identified child patient. In many cases, the child patient would be in closed physical proximity or maintaining physical contact with the biological parent at the time of introductions. When siblings were present in the therapy waiting room, most often the siblings would be engaged in play activities in the waiting room, generally oblivious to the process at hand. Once introductions were undertaken, I would explain to the child directly that I would be talking to his/her parents in the adjoining room, and that the secretary would assist the child in whatever needs that were pressing. The child would also be physically introduced to the location where I would be talking to the parent in the adjoining room, and shown the toys in the waiting room. A significant clinical note here was that in every case, with the exception of the one pre-adolescent subject, age 12, the

identified child patient would express verbal distress upon the parent's separation from the waiting room to the conference room. In many cases the younger children would exhibit extremely hysterical, agitated behavior requiring the intervention of office staff. In most cases where the subjects were identified with separation anxiety disorder, the children would physically wait immediately outside the conference room door, often crying, until the parent emerged. It should be noted that the child's behavior in this context was considered to have diagnostic significance in the overall context of therapy. Also the child's mother would often exhibit difficulty in requiring the child to remain in the waiting room.

Once the initial session was undertaken with the biological parent, the parent was given the opportunity to describe the problem in a semi-structured open-ended interview format. As the parent was describing the problem, the DSM-III criteria were utilized for further diagnostic validity. In all cases, the children met significant diagnostic criteria for SAD and OAD prior to the initiation of psychotherapy. All psychotherapy intake procedures and forms, including the DSM-III diagnostic criteria, follow-up research forms, and permission slips will be provided in Appendix E.

The second phase of the initial session involved providing the parents with the diagnostic impressions, recommendations for combined pharmacotherapy and psychotherapeutic procedures, including descriptions of the multi-modal therapeutic process, and the physiological justification for pharmacotherapy. Often further elaborations into the genetic, physiological basis for the anxiety disorder would be

provided. A brief description of the family's organization and inter-relationships with the child's anxiety was also mentioned. In the initial session, there was also some effort to identify very briefly members of the nuclear family with positive histories for anxiety. At the end of the first session, the child would be escorted into the therapy room wherein he/she would be informed about the nature of the problem as well as their parent's concern for them. In every case, the child would positively identify their discomfort, fear or worry as undesirable and a desire to feel better would be indicated. Often at this point in therapy, the child would be first introduced to the term "anxiety", as well as to the notion that they would be able to feel better and feel differently and that I would be assisting them, along with their parents. In addition, another significant force in the therapy process involved explaining to the child that medicine would be used to help him/her feel better; however, only he/she could decide if he/she was going to learn "to be brave" and that he/she could learn to feel differently. All children in this study were able to identify feelings of discomfort in an association with specific symptoms or behavioral patterns. All children in the study identified their fears, feeling state, and behavior as undesirable.

In most cases, follow-ups would be scheduled within one week of the initial consultation. Immediately following the initial session, the pediatric physician would be consulted and requested to provide a medication consultation. In this phone call, the dose level would be agreed upon as well as the duration of pharmacotherapy intervention. In all cases, younger children were provided with a dose level of 25 mgs of Imipramine per day for four to eight weeks of the therapy process. In one case, the pre-adolescent female

was provided with a dose level of 50 mg. per day based on body weight using a formula of milligrams per kilogram of body weight. There were no indications that medications were skipped, and parents indicated that children were taking medications on a prescribed regular basis. In one case, a child who was afraid or did not know how to swallow pills was provided with a liquid equivalent of the Imipramine medication.

With the onset of the second session, parents were questioned as to any changes based on medication usage in the previous week. In every case, medications were initiated within one to two days of my initial session with the family. Often parents reported a reduction of severity of symptoms or level of emotionality in the family following the initial session. It was at this point in the therapy that I began to identify patterns of anxiety-based family interactions. Sessions 2 through 8 are reported in this section, utilizing a description of general process and the accompanying therapeutic techniques used. In every case, at least 60% of the session time was spent with the parents followed by a conjoint discussion with the parents and child present.

Therapeutic Outcome

Data in this section were derived from child and parent interview data in Appendix A, sections V and VII and Appendix B, sections I and II.

Psychotherapy outcome was evaluated in this study utilizing specific questions in the semi-structured interview process. All questions pertaining to the child's perception of psychotherapy were asked in individual interviews with the child. Parents were requested to respond to their perception of the psychotherapy process in individual interviews and in

conjoint interviews with the children. In terms of process, it is important to note that all children in this study received medication pharmacotherapy for a period of four to six weeks. Eight of the children in the study received medication for four weeks in active treatment while one subject, the pre-adolescent, received medication for a six week period. One child with pronounced and severe school phobia received medication for a six week period. In every case, subjects received 25 mgs. Of Imipramine per day, generally at nighttime. The 12-year-old female subject studied received 50 mgs. of Imipramine per day, based on a standard formula of milligrams per kilogram of body weight.

It is significant to note that these children were placed on a titration schedule wherein they were allowed one week to gradually reduce medication levels in their blood stream. While not a subject of this study, the issue of titration off of medication for children is believed to be crucial to recovery. My past clinical experience indicates that children who had undergone abrupt cessation of medication often experienced more residual anxiety symptoms. One topic for discussion involves titration as a means of progressively allowing the individual's neurobiological system to assume the essential functions once provided by the medication. The week of medication titration usually involved 12 ½ milligrams of medication, or half of the child's dose per day, across a seven-day period. Dose levels used in this study were eight to twelve times lower than the only pharmacotherapy study found in the literature at the time of this writing.

Psychotherapy Overview

The essential psychotherapeutic procedures used in this model combined behavioral, linear, educational and systemic approaches. The Linear approaches involved behavioral programming, monitoring, encouragement, support, feedback, and time-out procedures. Parents were provided with a basic understanding of anxiety and anxiety's effect on the individual. In addition, the process of behavior change in children and parents was also explained in terms of family interaction patterns and the function, mechanisms of action and limitations of medication were also covered.

Systemic procedures involved interventions at the level of the mother/child dyad. Mothers were taught to deal with the child's behavior differently. Dyadic intervention occurred at the level of the marital dyad in terms of providing the mother with ways of involving the father in the child's recovery and instructing fathers *in absentia*.

Attendance in therapy sessions was nearly perfect, with participants rarely missing sessions with the exception of occasional illness. It could be said that attendance was extremely negatively reinforcing due to the removal of an unpleasant or aversive state (anxiety).

Specific Therapeutic Strategies

Parents were instructed that whenever they encountered an anxious behavior from the child in the form of separation anxiety or worry, the parent was to provide the child with the following explanation: "You do not need or have to worry about this. It only makes you feel bad and we do not want to talk about this any further". This procedure was designed to prevent the negative reinforcement cycle wherein the child's anxiety

would be alleviated through parent reassurance at the cost of increasing dependency and over-attachment on the part of the child to the parent. Often, in severe cases of separation anxiety where the child would engage in physical tantrums, time-out procedures would be used as well as removal of privileges and rewards. Parents would be required to keep a critical incident report of anxiety-related events and their reactions to these events. In each subsequent therapy session, the previous week's critical incidents of anxiety occurrence would be discussed between the parent and the therapist. Quantitative levels of incidents would be accounted for and further advice and coaching on the parent's intervention styles would be provided.

In the second half of each session, the child would be escorted into the therapy session with initial emphasis on a warm greeting and asking the child if he/she was "still feeling afraid", identifying symptoms and asking the child about the current status of the subjective anxiety. The child would once again be provided with support and encouragement from the therapist, the support and encouragement would also be elicited from the parent. In addition, there would be a conjoint review of the previous week's clinical incidents or anxiety in the child. In the course of this review, the child and parent would be encouraged to identify the negative or anxious behavior patterns and would be provided with positive alternatives regarding their separation behaviors, internal feeling states and cognitive self evaluation. At this juncture, the self-talk procedures utilized by Meichenbaum (1979, 1980) were utilized to engage the child's level of self-control relative to the anxiety state. Also, the child was presented with a constructive, developmentally

appropriate set of challenges. The child was informed that "you have a choice as to how you feel and how you feel could be determined by how you behave". A specific example was provided using both negative and constructive patterns. Often the child was informed that when he/she worries, feels afraid, and thinks bad thoughts, he/she often feels bad. At that point in the session, the child was instructed to think positive constructive thoughts, and it was noted and confirmed that he/she would feel good. The child was informed that "you do not have to feel afraid", and he/she would be challenged to feel brave and think brave thoughts. Examples of brave thoughts and brave actions were provided.

Reassurance was provided to parents in that they often felt responsible for the child's anxiety and attributed the problem to "faulty parenting". The parents were taught to explain to the child that anxiety feelings produced fears and they "did was not anything to be afraid of". This latter intervention could be described as a cognitive-behavioral strategy.

The Later Stages of Psychotherapy

An essential feature in the psychotherapeutic process involved a gradual titration or reduction of the child's medicine over at least a two-week period. It was my belief that this process allowed the child's physiological makeup to gradually and progressively perform the serotonin re-uptake functions that were once facilitated by the Imipramine. Additionally, it was the belief of most physicians that abrupt cessation of Imipramine could tend to result in side effects as well as a more acute subjective feeling of change that could be frightening to the children.

A very careful monitoring of the child's anxiety symptoms was undertaken during the process of medication titration. Medication titration did not begin until all symptoms had primarily been resolved. It was often the case that the majority of symptoms were checked and resolved within the first two to three weeks of therapy.

In the final two sessions, the focus was on emphasizing to parents and children the difference between the behavior patterns and family interactions before and after psychotherapy. In all cases, parents and children were informed that should any anxiety problems arise, they should contact the office. The pediatric physician was contacted in every case to structure the medication titration process for each child.

Family System Interventions

Often when the sole parent was in attendance in the therapy session, he/she was instructed to share these procedures and the results, as well as the results of the therapy session with their spouse. As discussed in the results section, it was noted that fathers in these families tended to be estranged or often out of the home due to work responsibilities. By providing this format for including the estranged parent, mothers often reported feeling supported and closer to the other parent. It was believed that the primary mechanism utilized with anxious and overprotective primary caretakers was a reduction of anxiety, self-blame and emotionality in the direction of a more logical strategic and behaviorally-based set of interventions with the child. By sharing the session with the other parent, opportunities for ventilation and support were often made available by involving the estranged parent.

Often the parents were instructed that "the medication can often be effective in relieving the chemical imbalance that causes anxiety in the child; however, the learned patterns of insecurity and fear and worry are the only behaviors that the child has known. Therefore, the counseling is designed to help the parents and children change behavior patterns that are dominated by anxiety on the part of both parent and child".

In all cases, it was determined that a biological parent, primarily the mother, would assume daily responsibility for attempting to deal with the discomfort of the anxious child. Faulty learning patterns were identified, with the primary pathological interaction involving a parent who attempted to use a variety of approaches, including ignoring or reassuring to ease the child's anxiety. Often this approach would lead to an exacerbation of the symptoms which could readily be described to the parent.

Chapter 4

Results

Integrating multiple diverse factors in the etiology and treatment of childhood anxiety disorders remains the call by prominent researchers in the field (Werry, 1991-Alexander & Malouf, 1993; Conners, 1972). The primary influences such as physiological, psychosocial, as well as inter- and intra- generational family interaction patterns must be reconciled and integrated into a multi-modal diagnostic and treatment system. For the purposes of description, elaboration and validation, I endeavor to describe each of the individual components separately, however every effort was made to identify the reciprocal influence of these factors in understanding childhood anxiety disorders.

This chapter involves detailed descriptions of the following topical areas:

Section 1. Biological and etiological aspects of childhood anxiety disorders.

Subsections will include, endogenous versus exogenous anxiety, bio-epidemiological factors, and secondary medical pathology.

Section 2. Psychosocial factors, the generational transmission of anxiety, bio-social influences, and family coping strategies.

Section 3. Psycho-therapeutic outcomes. 1) the child's perception of therapy outcome, 2) the parents' perception of therapy outcome, and 3) quantitative findings.

Section 4. Diagnostic Findings. Includes a section on co-morbidity.

Section 5. Pediatric Follow-up.

Using the semi-structured interview process as a guide, for each section identified, the specific research questions and procedures utilized to guide the investigation will be identified. In addition, quotations from research participants will be integrated into the commentary of each section. The section relating to inter-generational and etiological influences will include a detailed break-down of the forms and frequencies of intergenerational psychopathology in the family of anxiety-disordered children. This break-down of the forms and frequencies of psychopathology across generations will be provided as evidence in support of the unitary model (Last, et al., 1987), as discussed in the literature review in Chapter Two. Qualitative outcome findings in the form of participants' evaluations of the overall effectiveness of this treatment program will be provided. The quantitative findings on the process and outcome of the treatment model will be presented as well. Quantitative outcome measures, based on multiple statistical analyses utilizing the Wilcoxon Matched Pairs Test, have been presented in tabular form in order to measure pre-and post-treatment effects.

The inter-generational family systems model of Bowen (1978, 1996), in conjunction with T-F-A theory, was be utilized to account for the social/psychological effects, regarding the inter-generational transmission of the anxiety disorders in the family system.

Developmental precursors of childhood anxiety at the level of the child, as well as parenting patterns, were evaluated. Patterns of cognitive and behavioral adjustment in the child and parents. relative to the expression of the anxiety in the family, were examined.

Unique characteristics in the child participants, such as age and individual symptom expression, were evaluated relative to treatment approach and outcome. Both children and parents were asked to provide their analysis of the psychotherapeutic process and the effectiveness of pharmacotherapy.

The Biological Component

The "Unitary Model" (Last, 1987) was previously introduced in Chapter Two as a theoretical construct that offers an explanation as to how a number of clinical disorders may stem from a single, distinct underlying pathogenesis. Last contended that high rates of both anxiety and depressive disorders in the biological relatives of anxiety disordered children suggested that a single underlying chemical process, or disequilibrium, may produce varied clinical manifestations.

The explanation for why one individual in a given family system developed an anxiety disorder, while another develops a depressive disorder, has not yet been identified. One could assume, however, that either biological determinants and/or environmental or social-familial influences interact with the underlying chemical propensities to produce a given clinical disorder. I have endeavored to qualitatively explore the specific clinical manifestations and disorders in the family systems of children treated for childhood anxiety disorders. The specific breakdown of disorders in the extended family members may be found later in this section under "Bio-epidemiologic patterns".

The frequency of specific disorders by gender has been examined in terms of both psychological and psycho-physiological pathology. Findings suggested very strong

support for the Unitary Model proposed by Last (1987). A general synopsis of these results is provided in the following section, with emphasis placed on explaining the varied epidemiological patterns within the context of the individual child and family in question. The weaving of epidemiological patterns into an understanding of pathology in a given family system produced significant insights into the bio-social transmission of anxiety across generations.

Research objectives 1, 2, and the accompanying interview questions will be utilized to discuss these results.

Endogenous Vs. Exogenous Anxiety

The distinction between Endogenous and Exogenous Anxiety was often used by clinicians in the field to describe the internal, physiologically-based disorder vs. the environmental, external precipitating event. Closely attuned to Spielberger's (1968) state-trait model of Anxiety, the Endogenous distinction can be used synonymously. The scope of this research focused exclusively on the Endogenous form of Anxiety Disorder.

Those who have experience in the research or clinical fields will note that Exogenous Anxiety or Anxiety states precipitated by stressors are completely different phenomena than those under study here. The classical definition of state-related disorders identifies specific or multiple environmental stressors that trigger the symptom pattern. The symptom pattern is not apparent in the absence of the precipitating events. While there may be a lag in identifiable relations between precipitating events and the exogenous

state of anxiety, one can always trace the symptom to the event, under this conception state anxiety.

Endogenous anxiety, on the other hand, is taken to represent physiological expressions of genetically transmitted disorders. There is an obvious relationship between the state and trait forms of anxiety or the Endogenous and Exogenous manifestations. In evaluating the descriptions of respondents, I have determined that there was no significant precipitating stressful event in the initial onset or manifestation of anxiety in these children. Often what could be described as normal daily events or separation experiences would trigger the initial anxiety episode, when the event in question was often routine and had been repeated in the past without difficulty. In one case, the 8-year-old male child became extremely anxious on the family summer vacation and began to experience symptoms of Separation Anxiety Disorder, when previous beach vacations had not rendered a similar result.

In the case of a twelve-year-old girl, the mother responds as follows:

“I remember one day she was about nine. We were at home, it was a normal day. She came in the kitchen and said, ‘Mom, I’ve been getting a funny feeling inside today and yesterday like sick but afraid. When I was watching TV, but it’s not really scary.’”

A general theme of precipitant in all cases involved common ordinary events which appeared to render extraordinary reactions in the children as the initial symptom experience. There was no doubt that if normal ordinary daily events become associated with the initial episode of Endogenous Anxiety Disorder, then more stressful family events

such as the death of a relative, a house fire or parental illness could no doubt function in the same manner. The relative absence of external stressors or precipitating events in the population further defined the Endogenous basis that is presented as a proposition in this study.

Bio-epidemiological patterns

At the time these interviews were conducted there were no studies available that analyzed epidemiologic patterns in the extended families of anxious children. This study analyses the extended families of both parents across three, and occasionally four, generations (See Appendix C). A research sample of six boys and four girls, ages 5 years to 12 years, and their family systems comprised the object of study. As mentioned previously, all subjects underwent successful combined psychotherapeutic and pharmacologic treatment prior to enlisting in the research study. An in-depth exploration of the family systems of these children yielded the following general epidemiologic patterns. Of the ten children studied, there were eleven cases of diagnosed clinical depression in the biological relatives. Of those relatives, seven were males and four were females. Further exploration identified eleven biological relatives with diagnoses of anxiety disorders. Of this sub-sample, six were males and five were females.

An analysis of multiple or dual diagnoses was also tabulated. The results indicated twenty-six biological relatives of these children carried dual diagnoses. Thirteen males and three females carried at least two major diagnoses, which spoke to an extremely high level of co-morbidity. There were higher rates of co-morbidity among male relatives compared

to female relatives. An analysis of bipolar disorder in the sample revealed one case of diagnosed bipolar disorder and relatives of the sample population. This was a male who was diagnosed in young adulthood.

Another focus of exploration in this study involved an attempt to identify individuals who had experienced symptoms of various disorders in the absence of a formal diagnostic label. This endeavor was accomplished through a classification of symptoms attributed to an individual by the informant, again in the absence of a known medical diagnosis. Six relatives demonstrated significant symptoms of clinical depression without formal diagnosis. Four males and two females were identified in this category. It should be noted that the category of individuals included in the non-diagnosed groups does not overlap with other categories. Bernstein and Borchardt (1989) found that separation anxiety was the most common symptom associated with childhood depression, twenty-eight percent of SAD children showed symptoms of depression. While I did not measure depression in child participants, many children displayed significant psychological distress at the onset of treatment.

Sixteen biological relatives were identified as carrying significant symptoms of nervousness, anxiety or worry in the absence of a clinical diagnosis of anxiety disorder. Ten of these individuals were females and six were males. This category included symptom clusters of obsessive compulsive symptoms, nervousness, anxiety, and worry.

Based on the assumption that patterns of alcohol or drug abuse may be utilized by disordered individuals as a way of coping with symptoms, I endeavored to identify

individuals carrying a diagnosis of alcoholism. In the sample in question, 7 diagnosed alcoholics including 5 males and 2 females were identified. There was no effort to identify the success or failure of recovery from alcoholism in these individuals, nor was there an effort to identify a poly-drug usage. No studies were found at the time of this writing that analyzed drug addiction in the relatives of anxious children.

One startling finding involved the identification of sample relatives who either committed suicide, attempted suicide or demonstrated significant physical aggression toward self. In relatives of the sample in question, there were a remarkable 10 incidents of major self-aggressive acts. Seven males and three females were identified in this sub-group. Of the 10 subjects identified, 6 individuals (60%) of this sub-sample successfully committed suicide. These 6 individuals were comprised of 5 males and 1 female. Four individuals, 2 males and 2 females, had at least one major incidence of attempted suicide for which treatment was required: Demonstrated significant physical aggression toward self or threatened suicide on at least one occasion.

There was only one case where suicide was simply threatened and did not involve a definite physical act with aggression toward self. These results were striking in consideration of the fact there was a high proportion of males who were identified in this sample and that there was an overwhelmingly high proportion of successful suicides by proportion. Further discussion pursues the implication of this finding in that it holds significant potential for suicide prevention. It should also be noted that all cases of suicide or suicidal effort in this sample occurred in relatives between the age of 21 and 25 years of

age. The interest of identifying risks for suicidal behavior based on identification of anxiety disorder in the biological child relatives of these individuals was a significant and noteworthy finding. At the time of this writing, to my knowledge, a link between childhood anxiety and successful suicides in the relatives of anxious children had not been established.

Three cases of childhood separation anxiety in siblings were noted. All three cases involved identified separation anxiety in siblings of disordered children. In terms of identifying ADHD and ADD disorders, 2 males were identified as displaying symptoms of ADD and 1 male with ADHD. The children demonstrating diagnosed attentional disorders were all siblings of the samples in question. By the conclusion of this study, 2 females and 1 male from the original child sample carried diagnoses of Attention Deficit Disorder without hyperactivity. This number conformed to the 30% co-morbid rate with attention disorders previously speculated (McGee, et al., 1990; Strauss, et al., 1988). Anderson (1987) found an association between ADD and anxiety as an anecdotal finding, without noting percentages.

The subject of co-morbid psycho-physiological disorders also became a focus of identification in this study. A survey of the psycho-physiological disorders and relatives of the sample children identified a high proportion of varied psycho-physiological disorders. Fourteen biological relatives were identified as carrying psycho-physiological diagnoses. All fourteen cases involved variations of gastric pathologies. Five males and nine females were identified as carrying diagnoses of gastric psycho-physiological disorders. Disorders

including irritable bowel syndrome, peptic ulcer disease, diverticulitis, and Krone's disease were identified. These findings were noteworthy in that there were twice as many females demonstrating gastric pathology than males, in addition to the overwhelming frequency of gastric disorders in the relatives of anxiety disorder children. There was one case of identified bulimic eating disorder in an adolescent female sibling of one of the identified sample children. Again, the frequency of gastrointestinal disorders in the relatives of anxious children has not previously been reported, to my knowledge.

Finally, it was most interesting to note that there was an identified tendency or trend toward generational transmission of multiple or dual diagnoses, suggesting a generational tendency in co-morbidity. Also interesting was the finding that co-morbid patterns remain stable across generations. For example, a child identified with both Attention Deficit Disorder without hyperactivity and Separation Anxiety Disorder was found to have a father who suffered Generalized Anxiety Disorder and Attention Deficit Disorder as an adult. Anderson (Anderson, et al., 1987) found an association between ADD and childhood anxiety, however, no statistics were noted. In my study, twenty percent (two girls) developed ADD.

One additional finding notes that in consideration of the full range of psychopathology in the family systems of these child research subjects, very few individuals had ever received counseling or psychotherapy. Seven of the biological relatives which included 5 females and 2 males were maintained on either tranquilizers or anti-anxiety medications alone as the primary treatment. It was interesting to note that

pharmacotherapeutic treatments of these individuals who were treated, identified or diagnosed prior to fifteen years ago (around 1980) were overwhelmingly and almost exclusively prescribed tranquilizers.

It was my conclusion that these results in the area of Bio-Epidemiologic influences strongly supported the theoretical construct of the "Unitary Model" proposed by Last (1987). In addition, at a later point, discussion pursues specific findings identifying: Extremely high rates of suicide ability in biological relatives; high rates of dual diagnoses in male relatives; proportionally high rates of diagnosed depression in males; the propensity for females to receive psycho-pharmacologic treatment at higher proportions than males; a higher proportion of non-diagnosed depression in males; a high proportion of non-diagnosis for nervous problems across both genders; and the incredibly high rate of successful suicides, primarily among male relatives.

Additional areas of focus for discussion include the high rate of gastric psycho-physiological disorder in relatives of the sample population, including higher rates for this disorder among females. The interesting trend toward the transmission of co-morbid combinations from one generation to the next follows as a focus for discussion, in Chapter Five.

Research objectives 1 and 2 and their accompanying questions were utilized to explore the bio-epidemiologic patterns in these families.

Developmental Precursors

Information regarding childhood developmental precursors for anxiety were generated from section II and III, p. 138 of the same structural interview. An evaluation of the developmental expression of anxiety symptoms in the children studied revealed remarkable patterns across all cases. Since the initial onset of symptoms occurred in approximately the seven to nine-year-old range in both males and females, it was relatively easy to trace the manifestation of developmental precursors of anxiety. It is remarkable to note an absence of studies regarding the developmental precursors of childhood anxiety disorders.

In approximately 80% of the cases studied, these children had significant indications of colic in infancy. The possible relationship between infant colic and the later manifestation of Anxiety Disorders in children is interesting and fertile ground for future study. Remarkably, there was no case where the mother manifested symptoms of post-partum depression. Hock and Schirtzinger (1992) found that maternal depression was associated with childhood separation anxiety and insecure attachment in mothers and children. No other discernable developmental precursor was noted in this population after the development of colic in early infancy.

Development appeared to progress appropriately until the later two- and early three-year-old developmental point. In a remarkable 100% of the cases, mothers noted a reluctance on the part of the toddler to venture forth following the manifestation of high but normal physical activity in the two-year age range. Often signs of separation difficulty

would develop in the three to four-year-olds and would culminate in all cases in insecure attachment and separation difficulties on preschool admission.

The general pattern shown in all cases involved a progressive increase in the manifestation of worry, fear, separation anxiety, and/or insecure attachment between the ages of three and four, and again at ages seven to eight, which represents the mean age of initial symptom onset.

The developmental pattern of psychopathology was noted to increase in frequency punctuated by an increase of severity of anxiety related episodes progressing from age three to four and again at ages seven to eight. Often in cases where these children were compared to siblings, the anxious child would become more fearful, less novelty-seeking, more clutchy and clingy and handled transitions with more difficulty than siblings. A significant note on developmental precursors was that this pattern just described was also a strong precursor in the development of school phobia in children age seven and older. There is a virtual lack of research regarding developmental precursors associated with the development of diagnosed school phobia. It should also be noted that this pattern of developmental precursors did not appear to vary between male and female children. There were indications of childhood illnesses in a third of the cases studied here, however, it was not known whether this would be significant vs. the normal population, and did not appear to involve major life-threatening illnesses. Research objectives 2 and 3 were utilized to guide exploration into these areas, including the accompanying research interview questions.

The following parental reports were elicited to provide substantive meaning to the issue of developmental precursors of anxiety in the child participants. The parent of a nine-year-old female participant provided the following response when questioned regarding a description of the child's emotional and physical development from birth:

“All of a sudden, at age five, she began to become clutchy and clingy in gymnastics and would refuse to attend her workouts. She was afraid of falling and voiced numerous and varied physical complaints. Prior to that, she loved gymnastics.”

This child can be identified as Case #8 on the table of sample descriptions.

To the same question the parent of an eight-year-old female, identified as Case #7, provided the following response:

“As an infant, she cried continuously, which we came to find out was diagnosed as colic. In the first grade at age six she developed a stomach virus and suddenly became afraid of getting sick anytime she ate. This fear became more frequent until age eight, when she developed fears of eating out and the mere smell of food would make her nauseous.”

In the two examples above, the issue of childhood fears as a way of securing closer parental contact and coping with feelings of anxiety becomes evident. In addition, the role of somatic complaints and precipitating event, such as the stomach virus, also became obvious. In the former example, however, it is clear that often the initial precipitating event is not identified. To further illustrate the difficulty involved in identifying early

precursors to childhood anxiety, the parents of Case #7 were asked to respond to the following question: “Please provide a detailed account of your child’s emotional adjustment in early childhood.” Responding to this question, the parent noted the following:

“At age seven we took her to a psychiatrist at Charter Hospital. At that point in time she wanted to kill herself because she was obsessed with wanting to be a boy. The psychiatrist said that her gender confusion was normal for her age, she saw her three times and dismissed her, saying that she was OK.”

This parent’s response strongly suggests the need for clear and concise diagnostic information regarding the way that children respond to the precursors and the initial onset of anxiety disorders. One of the detrimental effects of combining childhood anxiety disorders under the classification of Generalized anxiety disorder is the tendency to miss the child’s idiosyncratic or developmental expression of anxiety that may be characteristic for a given age.

Utilizing the quality of attachment as an indication of the child’s emotional adjustment, the parent in Case #6, a nine-year-old adopted male child, responded to the following question: “Please describe the child’s emotional adjustment in early childhood in terms of the level of security.”

“He generally seemed secure in his attachment, however he appeared to become anxious in transition from one activity to another just prior to age

nine. He did not appear to be clutchy and clingy. There was no indication of shadowing or separation anxiety until a separation experience became evident. We felt that this was odd, in that we had not seen it before and it was a relatively new development.”

This parent’s responses to this question are revealing in that the child was adopted and there was no indication of a biologically-related anxiety disorder in the adoptive parents. Therefore, it is interesting to note that insecure attachment was not evident, however, anxiety upon separation became an isolated yet separation-specific symptom. This response would tend to lend support to the notion that anxiety in the biological parent of an anxious child becomes organized most around the initial manifestation of attachment difficulties.

In summary, one could note that the initial onset of anxiety symptoms in childhood is often acute and may not involve a clear precipitating event. The data suggest that in the more severe cases of childhood anxiety, separation difficulties are pronounced at an earlier age. Often, a precipitating event becomes the catalyst for separation difficulties in a child who had, prior to such an event, not experienced identifiable difficulties in separation. The identification of developmental precursors is difficult and features of insecure attachment are often insidious and not easily recognizable. In contrast to Hock and Schirtzinger (1992), maternal depression did not appear to be an associated feature in my sample.

Secondary Medical Pathology

It was noted previously that in my sample, the ancestors of anxiety-disordered children experienced medical symptoms in conjunction with anxiety and/or depression. Gastric disorders that appear to be psychophysiological in nature predominated the ancestors of the children studied. Perhaps one could say that the tendency to express stress physically in terms of gastric symptoms could be a covariant in the gene pool of this population. The relative absence of other disorders, such as migraine headaches or cancer, for example, could not be explained through this hypothesis.

Psychosocial Influences

Analyzing Bowen's Generational Model.

Murray Bowen's generational model (Bowen, 1978) was utilized as both a system for explaining the development, maintenance and transmission of anxiety within a family, and as a method for psychotherapeutic intervention. Bowen has delineated six basic concepts, each of which was evaluated in terms of their correspondence to the outcome in this study.

“Differentiation Of The Self” - The children in this study were observed to be extremely immobilized by the manifestation of anxiety at the time that they were referred for treatment. In every case, the child demonstrated severe dependency, usually upon the mother. In verbalizing fears that something would happen to the parent or to the child, this behavior in the child often elicited reassurance and attention from the parent. It would seem that there was a temporary and immediate reduction of the child's anxiety at the expense of fostering extreme dependency by the child toward the parent. The dependency

or co-dependency resulted from the child's apparent feelings of fear and anxiety. Descriptions of the emotional status of these children prior to therapy characterized the children as fearful of venturing out, insecurely attached, avoiding routine socialization activities such as having friends over and sleep-overs, and often phobic school avoidance. These children were generally too preoccupied with their fear and anxiety to enjoy either themselves or typical activities. The children were also characterized by a lack of confidence and assertiveness, and generally demonstrated arrested development of self-esteem. In turn, parents were preoccupied with reassuring the children regarding safety rather than encouraging and praising the child's independent activities. While Bowen established the Differentiation of Self Scale as a means of attempting to identify adults with varying degrees of low self-esteem or poorly developed self systems, the concept was generally not associated with children. It is my belief, however, that anxiety delays, and may arrest, the development of healthy self-esteem, as evidenced among the children in this study. In order to create self-motivated success experiences, children must obviously feel comfortable and secure and safe. It is easy to see how protracted anxiety conditions throughout the lifespan take such a deleterious toll on the development of a healthy self-esteem in the individual. To this extent, Murray Bowen's concept of differentiation of the self provides a valuable means of viewing the development of the self system.

“The Nuclear Family Emotional System” -- It is generally accepted that Murray Bowen developed the concept of a nuclear family emotional system to describe marital conflicts between adults that were caused by one (or both) spouse(s) manifesting low

differentiation of self and consequent high anxiety. In Bowen's theory, emotionalism is correlated with a poorly differentiated self which creates anxiety and emotionalism rather than rational thoughts and reason. In general, the concept has not been considered applicable to children; however, all children in this study presented as extremely emotional and were often described as "hysterical", demonstrating high anxiety and an arrest in the development of healthy self-esteem. Left untreated, one could assume that these patterns could extend into adulthood, where this concept, as Bowen originally intended, appears to be extremely valid. Parents of the children studied, however, did not appear to be overly emotional, nor was there a predominant indication of marital conflicts among the parents of the children studied. As mentioned earlier, a generational skipping process has been noted, wherein the grandparents of the children studied had a much higher degree of apparent psychopathology. It is believed that perhaps the concept of the family emotional system could be valid when viewed across of every other generation.

"The Family Projection Process" - Utilizing the concepts described in the differentiation of self and nuclear family emotional system, family projection process is a logical extension of the way in which poorly differentiated adults cope with levels of anxiety. In Bowen's writings, the description of the identified child patient is very common. In order to diffuse conflict, one or more parents would theoretically project the distress in the marital dyad onto the child in the form of concerns regarding the child's functioning. This would reduce stress in the marital dyad. In direct contradiction to Bowen's description, this effect was not noted in this study. There is no doubt that

parents, particularly mothers, demonstrated high levels of overprotective and indulgent parenting behaviors. One could describe this phenomenon as a pattern of identified parenting behaviors in response to the child's anxiety, or one could say the child's anxiety was a response to the parent's indulgence and over-protection. An obvious circular relationship exists. This pattern was strong and obvious in all families studied, with the exception of the adopted child wherein parents demonstrated indulgence without over-protective behavior. As opposed to describing this process as projection, I would rather suggest that there were obvious generationally transmitted parenting styles that could be identified as a consequence of social learning, from one generation to the next. The level of marital conflict and emotional dysfunction in parents does not conform to Bowen's suggestion; however, the contribution regarding generationally transmitted learning styles is clear and obvious.

“The Emotional Triangle” -- As mentioned previously, Bowen's concept of marital conflict projected on the child was not apparent in this study. However, a triangle did exist between the adult, the child, and the child's anxiety or fears. In one sense, the child created fears as a way of coping with or managing anxiety, while the parent's reassurance created a mechanism for reducing or regulating the child's anxiety.

There was no evidence to suggest that anxiety in the family system functioned as a homeostatic regulator. Once the child's anxiety was resolved, there was no evidence that parents pathologized the child. Nor did there seem to be an effect of reducing conflict in

marital dyads. The dynamic of regulation of anxiety in the child via the parent's attention and indulgences did appear to be valid.

“The Intergenerational Transmission Process” -- While the origin of Murray Bowen's conception of anxiety is unclear, I am suggesting a modification to the concept of generational transmission based on the data in this study. I propose that an interaction exists wherein generational causes of anxiety are expressed initially on a physiological level while the mechanisms for coping with anxiety symptoms occur socially at the level of the nuclear family. These coping mechanisms are learned and passed on from one generation to the next as parenting styles. One could say that the social learning model inherent in Bowen's theory regarding the generational transmission of anxiety is valid with the addition of the inheritability of the anxiety. The “anxogenic” interaction of heredity and social learning is proposed as a more contemporary definition of the inter-generational transmission of anxiety.

“Sibling Position” -- While sibling position no doubt exerts an influence on family interactions, there was no effect of sibling position noted in this study. The identified child patient did not appear to represent a specific position in the family based on birth order or age.

In summary several of Murray Bowen's theories appear to be extremely accurate in describing the operation of anxiety in the social system. The differentiation of self, the nuclear family emotional system, and inter-generational transmission were predominantly accurate in describing the operation of anxiety in the families of children studied. The

concepts of emotional triangles, sibling position, family projection process and the family emotional system were not indicative of the population studied. Perhaps this is due to the fact that Murray Bowen studied the operations of schizophrenic families. Overall, however, Bowen's model does provide many key concepts that help describe, define and understand the operation of anxiety from generation to generation and within the nuclear family as well as the parent/child dyad.

The T-F-A Model.

The multi-model system utilized by Hutchins and Cole (1992) describes a system of reciprocal relationships between an individual's thoughts, feelings and actions. Subjects in this research program responded to a series of semi-structured interview questions designed to elicit patterns of thoughts, feelings, and actions (T-F-A). Further examples of participant quotations may be found under "Psychosocial Influences", in Chapter Four. Prominent themes relating to specific patterns of T-F-A have been identified across all research subjects, relevant to the following questions:

Section B, Question 3 - "Describe any specific family or attachment difficulties during your childhood. Describe relevant thoughts, feelings, actions."

Most respondents identified a specific theme in which childhood anxieties appear to facilitate various fears regarding the safety of the child or the parents. The actions that resulted from these fears tended to promote insecure attachment of the child to the parent. Anxieties would generally be experienced as either vague or specific fears, which in turn would elicit parental reassurance and often over-indulgence. Anxiety temporarily

dissipated at the expense of increased dependency or co-dependency between parent and child. Decreased risk-taking behavior, or very little venturing away from the parent by the child was another frequent consequence of the anxiety-reduction cycle. In Case#2, parents responded to question three as follows:

“I was nine when my dad fell off the roof, he was taken to the hospital in an ambulance. From then on I was afraid of heights (feeling)(thoughts and over-attached actions).”

Section B, Question 4.a) “Please describe marital adjustment prior to the birth of the anxious child or children in terms of thoughts, feelings, and actions.” In Case #7, a parent responded to the question as follows:

“She was our first child. We would both say that before she was born we were as close and loving (feelings) as we were after her birth. I think we have always seen each other as mutually supportive (thoughts) and show that in our actions (actions).”

This question generally appeared to be consistent across respondents’ descriptions. Most mothers reported successful marital adjustments with feelings of intimacy and affection, thoughts of closeness, and actions which seemed to promote closeness and affection. Other quotations pertaining to this question may be found in the Chapter on family relations and coping styles.

Section B, Question 4.b) “Address marital closeness under conflict in thoughts, feelings, and actions.” In Case #9, the following response was provided:

“Whenever we disagree or become angry, we will usually separate briefly then get together and discuss it. I feel responsible even if I am not (guilt feelings). I get nervous and worried (anxiety feelings) I am hurting him (thought), and feel like we need to get close again (thought implying future action).”

Most parents in the sample described a history of feeling uncomfortable with conflict, as it would facilitate anxiety. Another feeling state, “feeling responsible” was generally described by parents in terms of thinking that they were responsible for the marital conflict. Consequently, conflict avoidance decreased marital closeness at least temporarily. It is apparent in the sample mothers and fathers of these anxiety-prone children tended to feel more anxious while under conflict. Closeness was often sacrificed at the expense of avoidance and anxiety reduction.

Section 3, Question 5. “Please describe the effects of the child’s anxiety/behavior on the marriage and family in terms of thoughts, feelings, and actions.” Participants’ responses to this question are available under “Family Relations and Coping Styles”. Most parents described thought process in terms of “concern and worry” creating feelings of responsibility, which in turn produced actions in the form of efforts to reassure the child. The implication here is that reassurance would temporarily decrease the child’s anxiety at the expense of over-protection and indulgence. It is interesting to note that the same pattern of thoughts, feelings, and actions occurred at the level of the parents’ interventions and at the level of the child’s effort to cope.

Section 3, Question 6. “How did the child’s anxiety affect the quality of the parents/child attachment in terms of thoughts, feelings, and actions?”

As in the previous question, when children appear to be anxious and fearful, they stray very little from a close proximity to parents. Efforts to secure reassurance and closeness as a way of coping with anxiety on the part of the child has been noted. Feeling responsible, parents would often indulge or over-protect the child, essentially sacrificing the risk-taking, autonomy, and individuation of the child. This suggests that parents unknowingly assisted children in avoidant behaviors to achieve anxiety-reduction in the child.

Child Questions, Question 5. “Do you remember the medicine you took when you came to see me? How did it make you feel, what did you think, what did we do?” Child participant responses to these questions are available in the section “Therapeutic Outcome and Parents’ and Child’s Perceptions of Therapeutic Outcome”.

Most children in the sample described feeling better, less afraid, not as upset. The associated thought process was described as a awareness of feeling better, or not afraid. In terms of the associated actions, the children often responded that they could do more things such as sleep-over or go to school without being afraid. It is significant to note here that children primarily focused on the relief of the fear state, and an awareness that they would be able to do more when not afraid. The children displayed difficulty associating three concepts and deriving abstract conclusions such as anxiety produces fear, which, in

turn, produces avoidance. The children seemed to be able to associate any two concepts at one time, however, three concepts were difficult.

Question 7. “What did we talk about when you came to see me? What did you think? How did you feel?”

Most children recalled that they talked primarily about being brave and how to “feel better”. Again, the children had difficulty associating both the medications and the counseling in terms of feeling better. Children were able to conceptualize one contribution to a specific outcome; however, two contributions to a singular outcome appeared to be difficult for them to grasp cognitively. They would note that counseling and efforts to feel brave would make them feel better, or medication would make them feel better, but the combination of these events provided a difficult abstraction for the children.

Question 8. “How did you and your mom get along after you stopped coming here? Was it different with your thoughts, feelings, and actions?” This example of a child’s response to this question may be found in “The Child’s Perception of Psychotherapy”.

Most children described the thought process of being aware that they were not afraid. Often children described the emotional process of not feeling afraid and not needing their mothers, as well as their ability to do more things (actions), as a result of not feeling afraid or needing their mother. Again, responses to this question strongly suggest that anxiety has an inhibitory effect on separation (as in healthy separation experiences) and the individuation of the self. It is easy to see that adult forms of anxiety such as

agoraphobia, and avoidance of novel situations are often a frequent symptom of a severe depletion in the self system due to constriction and social withdrawal.

Question 3.d) “Please evaluate the counseling process and its contribution to the child’s recovery in terms of your thoughts, feelings, and actions.” One example of the parents’ response to this question may be found under “The Parents’ Perception of Psychotherapy”.

Most parents described the feeling state resulting from counseling as feeling “reassured”. The thoughts that accompanied this state were that the child would get better, and the action that resulted was a deferral of responsibility to the therapist. Again, it is interesting to note that the therapist assumes the same role of reassuring agent as did the parent in relation to the child’s pathology. Perhaps it is in this way that the behavior change results as a release of responsibility in terms of less indulgence and over-protective action on the parent’s behalf.

Question 6.d) For the Child - “How did you think, act, and feel after you came to see me?” An example of a child’s response to this question may be found under “The Child’s Perception of Psychotherapy”.

Most children had difficulty separating feeling states and actions involving multiple contributions. Children stated that they would feel better because they were not afraid, so they therefore did not think that something would happen to them, or to their mother or father. Consequently they did not need to stay as close to parents or receive as much reassurance. It appears that secure attachment by children to parents is an adaptive

behavior rendering a sense of physical safety to the child. Over-protective behaviors, on the other hand, are organized around the “false-alarm anxiety” whereby excessive protection occurs at the expense of individuation.

Question G.1. For the parent - “Please give an accurate account of any problems, stresses, or anxieties in you or your child since their treatment, in terms of your thoughts, feelings, and actions.” An example of a parent’s response to this question may be found under “The Parents’ Perception of Psychotherapy”.

Once again, very few problems, stresses, or anxieties were reported by parents, who generally reiterated that as their concerns abated, they engaged in fewer over-protective behaviors.

Question G.2. For the Child -

Once again, children responded with reduced fear as a feeling state. Thoughts involved a sense of less need for their mothers, and actions were equated with the ability to do more things without fear.

In summary, it appears that the analysis of thoughts, feelings, and actions in the family systems of Anxiety Disordered children provides essential information as to the inter-relationships within and between individuals in the family. Describing these inter-relationships in behavioral terms appear to be the most logical way to conveying the inter-relationships. It is my assertion that a biologic basis for the anxiety state appears to be pre-eminent, whereby thoughts and actions are organized around feeling states. Consequently, it seems that specific thoughts and actions that were driven by anxieties

appear to continue to reinforce those anxieties. This depicts a circular progressive relationship within and between individuals that could best be described as away to cope with or adjust to anxiety in one family member, at the level of the family social system. Essentially, all family members were attempting to cope with the effects of anxiety in an individual (the child); however, pattern maintenance appeared to be the result in any efforts to diffuse or relieve anxiety in the individual. Perhaps this is the primary mechanism in which anxiety patterns as social behaviors were transmitted from generation to generation.

Research objectives 1, 3, 4, 5, and 7 were utilized to explore the psychosocial influences, including their accompanying questions.

The Generational Transmission of Anxiety Disorders

Research objectives 1, 2, 3, 5 and 7 were utilized to explore issues in these sections, including the accompanying questions.

The Diagnostic and Statistical Manual - Revised (DSM III-R) published by the American Psychiatric Association (1987) identifies a higher incidence of Anxiety Disorders among first-degree biological relatives of Anxiety Disorder children. The exact extent of the increased incidence in terms of prevalence or penetrant rates in the DSM III-R has not been clearly specified.

In reviewing the major research studies related to the Epidemiology of Anxiety Disorders in childhood, Turner, Beidel and Epstein (1991) have concluded that Anxiety

Disorders are familial, and the role for genetics has been suggested; however, the exact nature of this familial factor has yet to be revealed unequivocally.

I have utilized the data provided in the section on bio-epidemiologic rates and patterns of familial transmission of anxiety in the ancestors of the children under study here. In all 10 cases there was overwhelming evidence for the transmission of anxiety disorders, clinical depression, or some clinical variant in 100% of these cases. These findings are in direct contradiction of those of other researchers. For example, Tyer (1985) found adults with Generalized Anxiety Disorder experienced onset of the disorder in childhood in only 20% of the cases studied.

This contradiction was significant to the extent that the American Psychiatric Association, in publishing the 4th edition of the Diagnostic and Statistical Manual has eliminated the diagnostic categories for Overanxious Childhood Disorder and Separation Anxiety Disorder in childhood. The APA subsequently re-classified these childhood disorders under the category of Generalized Anxiety Disorder. In noting their justification for this re-categorization, publishers of the DSM IV note a lack of discriminate evidence to support distinct diagnostic categories for Overanxious Disorder in childhood or Separation Anxiety Disorder in childhood. APA authors suggest that these childhood anxiety disorders are manifestations of the adult expression of anxiety known as Generalized Anxiety Disorder. Again, this contradicts Tyer's findings that Adult Generalized Anxiety Disorder does not have a recognized high proportion of initial onset in childhood.

Results that I have presented regarding symptomology would suggest strong evidence for the validity and utility of SAD/OAD classifications as distinct clinical entities. The ancestors of these children demonstrate high rates of varied clinical pathology.

The methodology used by the authors of DSM III and DSM IV involved sample surveys of case studies found in contemporary clinical settings. In the name of economy and in the face of very sparse research findings for OAD and SAD, the authors concluded that essentially Childhood Anxiety Disorder classifications could be subsumed under the adult rubric of Generalized Anxiety Disorder.

According to Rutter, (1980), historically a disturbing trend has existed wherein clinicians and researchers have attempted to apply adult diagnostic terminology, symptoms and labels inappropriately to children. Rutter has aptly termed this process of misguided diagnostic generalization as "Adultomorphosis". While similarities between childhood anxiety and adult anxiety symptom patterns exist, these research findings suggest that Childhood Anxiety Disorders are distinct clinical entities with strong developmental extensions into adulthood, although the nature of adult manifestations of childhood disorders was developmentally variable and distinctly different for adults.

It is my assertion that one cannot completely and fully comprehend the nature of the generational transmission of Anxiety Disorders without an in-depth qualitative understanding of the function of Anxiety in the given family system. By evaluating the generational transmission of Anxiety in the context of family interactions patterns, one may only then fully understand the function, meaning and social impact of the disorder in

question. For example, two families demonstrating generational patterns of Separation Anxiety Disorder may in fact experience, understand or react to the same symptoms quite differently. In the next section, the bio-social interaction of physiology and learning, in Childhood Anxiety Disorder are discussed relative to findings in the sample population.

Bio-Social Factors in the Generational Transmittal of Anxiety.

Previous research into the treatment of Childhood Anxiety Disorders experienced limited effectiveness. Kety, (1978), attributed the relative ineffectiveness of treatment models in the area of Childhood Anxiety Disorders to a failure to account for the interactive bio-social features of the disorder. There appears to be a clear interaction of biologic and social influences across generations in the transmission of anxiety in a given family system.

A significant finding of this research demonstrates that in all 10 cases in the sample population study, one or both parents of the Anxiety Disorder child demonstrated major attributes, symptoms or features of a clinical disorder whether diagnosed or undiagnosed. In four of the children studied, the father was identified as manifesting indications of major clinical disorder while in four cases the mother was identified as demonstrating features of a major clinical disorder.

It should be noted that the severity and form of the parent's clinical symptoms changes and varies across the developmental span of the parent's life. To some degree, however, it could be said that symptom patterns were active, operating and influential in at least one parent in the sample population and therefore directly affected the manner in which the Anxiety Disorder child was managed. In two cases, both parents demonstrated symptoms of at least one major clinical disorder that was in some degree active at the time of the child's treatment. This conclusion is based on data reported under "Bio-epidemiological Patterns".

A clear and obvious trend exists in the data wherein when the father was the identified contributor of pathological influences by his history, in three of the cases the father demonstrated clear and obvious symptoms, whether diagnosed or undiagnosed of Clinical Depression. In one case where the father was identified as the major pathological contributor, the father carried a previous but inactive diagnosis of Panic Disorder. It was significant to note that these patterns have been identified even though respondents in this study were almost exclusively the child patient and the mother.

The most significant contribution was provided by the mothers of these children. In the cases where the mother was identified as the primary pathological contributor, three cases involved symptoms of Generalized Anxiety Disorder, strong indications of a Separation Anxiety Disorder in childhood and Obsessive Compulsive features in the maternal contributors. One case where the mother was identified as the primary pathological contributor, all indications pointed to the diagnosis of Clinical Depression in the mother.

These results strongly suggested that there was an effect by gender in terms of the transmission of symptoms across parent-child generations. It was most interesting to note that in the case where both parents were identified as the primary pathological contributors, both cases involve the child's symptoms as diagnosed conditions of severe Separation Anxiety Disorder with patterns of pronounced phobia, Obsessive Compulsive Disorder, and Depression in both parents.

One could conclude that when both parents are identified as pathological contributors, there were strong indications of multiple diagnoses in the parents and in the child. In two cases where both parents were identified as pathological contributors, there was no indication of reduced outcome effectiveness. The presence of significant Obsessive Compulsive Disorder symptoms as well as multiple phobias in both parents and child in these cases was a significant finding. There appears to be no relationship between the sex of the contributing parent and the sex of the child patient.

In all cases, there were strong indications of observational learning by the child of the parent even though the parent's disorder was more active at an earlier point in their life or had passed into partial remission at the time of the child's treatment. The observational learning patterns identified appear to take the form of "tendencies to worry, insecure attachment on the part of the parent historically and tendencies toward pessimism or despondency".

Observational learning was noted to exist in Obsessive Compulsive or ritualized behavior and phobic preoccupations. The interactive factors were most apparent with mothers reported responding to the anxious child's behavior with attention, indulgence, overprotection and worry. Surprisingly, this occurred whether mother was identified as the pathological contributor or not. This finding would tend to suggest that even though mother was not identified as the pathological contributor, she may have adopted or assimilated behaviors indicative of the disordered parent in coping with the Anxiety of the child. In Case #1, the mother is the primary caretaker, her extended family relatively free

of pathology, while the father and his extended family carried numerous diagnoses. This data was derived through generational analysis.

The following excerpt was provided as an example that was indicative of parents in this population that very clearly demonstrates the learned anxious coping behaviors that pass from generation to generation. The following excerpt was provided by the mother of a child diagnosed with Overanxious Disorder, wherein the child's major symptoms were anxious worry over becoming ill or being harmed. This was a report provided by the child's mother concerning her family of origin.

"My mother was extremely worried about all the children all the time. She was unable to watch us swim due to her Anxiety about us drowning. She constantly worried about me and my brother becoming ill and about us getting sick. I worried a lot about myself about becoming ill until my twenties, much more than my brother. As a child, I was scared to death of dogs, I worried a great deal and had major nightmares. I worried a lot about catching diseases and felt worried and anxious about my parents dying. I remember at one point I made a deal with God that I would be good if he would protect us all. This pattern has repeated itself, when my child's problem became worse, he was constantly worrying about dying or myself and my husband dying. I would constantly reassure as my mother reassured me although I never mentioned to him anything about my past. After about the age of 25, my Anxiety lessened and it seemed that once my

first child was born following my pregnancy my Anxiety appeared to disappear. It was all but forgotten when I became quickly reacquainted with my history when my child began to come to me in hysterics every ten to fifteen minutes fearing something terrible would happen."

It is significant to note that this excerpt was taken from the report of a maternal respondent who was considered the pathological contributor to the child's Anxiety although that parent had never been diagnosed with an Anxiety Disorder.

Moving from the child through the parent to the grandparental generations, one can see the influences of anxiety symptoms organized around fears of illness, death and injury to other family members. Also, one can easily identify the pattern of parental indulgence and worry over the child's anxiety based on the parent's propensity for anxiety. The resulting vicious cycle can be seen as a strong exacerbating influence within the family system and across generations.

The following excerpt was provided by a respondent mother in a family where both parents are considered pathological contributors, even though neither parent had been formally diagnosed with Anxiety Disorder. The following case involves a male child patient whose presenting anxiety symptoms involved severe Separation Anxiety Disorder and School Phobia.

"As a child, I hated fire engines because I had a fear that the house would burn down. I worried a lot and would sometimes awaken at night imagining that my mom was calling for me. It seemed that eventually I just

got over it. My husband told me once that he never liked leaving his mother and going to school. He had a real problem with this in that one point was almost expelled from school. He claims that he wanted to know that his mother would be there for him. To this day his mother was extremely worried and overprotective of the boys even though they are adults and have their own families. It seemed that the more my mother-in-law worried about her son as a child the closer he felt he needed to be to her. All of this seemed forgotten until my son started refusing to go to school, began shadowing me and would not leave my sight. I know that we are overprotective parents what I didn't know was that we would have to relive the past again with our son."

Once again, a startling feature of the transmission of Anxiety from generation to generation within the family system was apparent in the previous excerpt. It was also notable that symptoms that existed for parents when they were children seem all but extinct until the re-emergence of these symptoms occurred in their child. What was remarkable was the similarity and style of the symptom manifestation and the absence of any knowledge on the part of the child. Many other parent respondents reported a similar phenomena in that at least three generations of parent-child interactions were characterized by strikingly similar pathological styles organized around the Anxiety Disorder in question.

When studying the severity of symptom disorders across generations, I was impressed with a significantly higher level of symptom severity across all disorders with both the child and the grandparental generations, as opposed to an obvious reduction of symptom severity across all disorders with the parental generation. This "generational-skipping-phenomena" was noted in the qualitative descriptions by parents in all cases. There was also an obvious trend toward the use of alcohol and alcohol-related disorders in the grandparental generation with the suggestion that alcohol was more frequently used in the grandparental generation as a "self-medication for anxiety". The obvious problem with this remedy being the sedative effects of alcohol, creating a reduction of Anxiety at the expense of possible addictive disorders or lost of behavioral control. These results are based on data found in the section on "Bio-epidemiologic Factors".

While 70% of the parents studied in this child sample manifested the same or similar symptomology (primarily Separation Anxiety), the level of diagnosable disorders and symptom severity previously mentioned was significantly less than the grandparental generation. Parents and grandparents were noted to be significantly over-protective regarding their children and the manifestation of anxiety.

One can assume that the overprotective phenomena could either be the cause of, or the effect in the transmission of Anxiety Disorders. I believe that over-protective behavior was a coping mechanism that served a systemic function. In a single case where the anxious child was adopted, there were no indications of protective behavior on the part of the parents, however, there were patterns of overindulgence.

Family Relationships and Coping Styles

Research objectives 1, 2, 3, 5 and 7 will be utilized to explore issues in this section, with their accompanying interview questions.

In evaluating the coping styles of children who exhibit Overanxious Disorder and/or Separation Anxiety, several interesting trends became apparent in the data. It would seem that the primary manifestation of anxiety in children was identified as fear. While some children identified as demonstrating Overanxious Disorder generally worried about harm to attachment figures and to themselves, in all cases this fear manifested as insecure attachment and a need to shadow caretakers.

There was no clear delineation between the relative decrease in the number of fears across both overanxious and separation anxiety categories. Overall, both groups of children were known to demonstrate symptoms of attachment anxiety. While neither group could be identified by the number of distinctly different symptoms, there was a tendency for the child to manifest overanxious or separation-related symptoms. It is my opinion that children manifest anxieties in distinctly different symptom patterns than do adults in our society. Separation anxiety related symptoms appear to fall in the exclusive domain of child-related anxiety disorders. To group these children into categories of "Generalized Anxiety Disorder" would represent a failure to identify attachment anxieties as a primary focus of intervention with children.

In every case the child's effort to cope with anxiety through fear and over-attachment was an essential dynamic in the symptom manifestation, maintenance and

consequent therapeutic focus. Apparently, insecure attachment and separation anxiety have a selective advantage to the species in allowing for close parent/child protection. Often, however, the severity and duration of insecure attachment often leads to situations wherein children fail to engage in necessary exploratory behaviors. These behaviors are felt to be essential in the development of healthy self-concept and self-esteem. These children appeared to lack success experiences and the ability to engage and deal with the environment around them, without the protection of parents. These observations regarding attachment security in anxious children, have been derived from a combination of psychotherapy notes and themes emerging from parental interviews.

One could argue that the high prevalence of suicide in the ancestors of these children could be the generational expression of felt inadequacies, inabilities in dealing with the environment, and a total lack of self-security. It would appear however, that perhaps anxious children who became anxious adults lacked the strength of an empowered sense of self. As a result, the anxious parent finds it difficult to properly praise, nurture, and understand the importance of independence in children.

The following participant responses are intended to underscore the effects of childhood anxiety and insecure attachment on family relationships. Case #8 involves responses by the parent of a 9-year-old, diagnosed with overanxious disorder. The question presented to this parent was as follows: “When did anxiety become evident in your child, and how did the family members react?”

“At age five she would not cope well with transitions, she became hysterical, crying and distressed. Our reaction as parents was to become frustrated and confused and we often felt we were doing something to trigger her difficulties.”

In Case #7, the parent of an eight-year-old female diagnosed with SAD, OAD, and multiple phobias, responded to the following question: “Please provide a detailed description of the effects of your child’s anxiety on the closeness and distance between family members.”

The parent response:

“She became overly attached to me as she began to have problems. Her father could not handle her problems, and he would often get angry at her. It seemed that her problems with anxiety and separation appeared to intensify when we moved to this area due to a job relocation. For a while, we attributed her difficulties to this move.”

In the preceding examples, it is clear that the onset of anxiety disorder symptoms in these children would often leave parents confused, angry, and distressed. The typical parent attribution for the child’s problem would often take the form of internalized guilt regarding their parenting styles, or, in the latter example, attributing the child’s difficulties to transitions or precipitating events.

To further illustrate the effects of childhood anxiety on the family, the parent participant in Case #7 was asked to respond to the following question: “Describe the

effects of your child's anxiety on the marriage and the family, in terms of thoughts, feelings and actions.”

“We often thought that her problems were straining the marriage. Both of us felt that dealing with her took a great deal of energy and we would often become grouchy and fatigued. Once distressed, we would often argue with each other, blaming one another for not helping enough to attend to her fears. As a result of these discussions, I often thought that I did not do something right in raising the child. As a result of this thinking, I would feel guilty for questioning my love for my own child. My actions toward her often showed the combination of my guilt and frustration when I would go back and forth between frustrated lectures to the child, and reassuring her or sometimes even ignoring her behavior.”

Beginning with the parents' irrational attribution regarding their role in the anxiety, feelings of guilt, frustration, and anger would often be invoked in the parent. As a result of vacillating between guilt and frustration and anger, the parents' actions toward the child would consequently inconsistent and confusing to the child and parent, with the likely result of invoking further anxiety. From a behavioral perspective it is easy to see that emotional confusion due to irrational attribution on the part of the parents would often result in a random reinforcement of the child's anxious behavior, resulting from accompanying guilt in the anxious parent. Utilizing Bowen's family systems model, symptoms in the child were often responsible for escalating conflicts between parents

rather than diffusing dyadic conflicts between parents as the proposition of triangulation would predict. Often parents reported that the onset of anxiety in the child often facilitated marital conflicts when a loving and close spousal relationship had been pre-eminent to the onset of anxiety in the child. The continuation or persistence of marital conflict in my participants appeared to be affected by the level of marital conflict prior to the onset of anxiety in the child.

It would seem that the effect of the child's anxiety on the level of conflict in the marital dyad rendered differential results. The effects of the child's anxiety on marital closeness appeared to be variable across the participants studied. For example, in Case #3, the parents of an eight-year-old male child with over-anxious disorder and fears of the dark responded to the same question as follows:

“His anxiety appeared to make our marriage closer. His father could not deal with his problem and our thirteen-year-old son felt that he was not getting enough attention from us and began to yell at his younger brother whenever he had an incident of anxiety or fear. It would seem that our thirteen-year-old would begin to act out and do something to misbehave and get attention whenever his younger brother became anxious. As a result, my husband and I had to communicate and pull together to try to deal with these problems.”

In terms of triangulation, these results would leave one to speculate that if a marriage is close and intimate prior to the development of the child's problems, the onset

of anxiety in the child may not facilitate marital difficulties. To further illustrate the variability involved in the effects of the child's anxiety on marital closeness, in Case #2, the parent of a 5 ½ -year-old male with separation anxiety, responds to the same question as follows:

“My husband was angry at the child because we lost our privacy and he was blaming me for not reassuring the child enough. Even though he (the child) is cured, my husband and I have not been as close since.”

By contrast, the father of an eight-year-old child suffering from over-anxious disorder in Case #3, responds to the same question as follows:

“My wife and I were made much closer as a result of pulling together to help our child over his anxiety. Even now, a year later, we remain closer.”

Parents' Perceptions of Psychotherapy Outcome

Questions 3 and 4 were designed to evaluate the parents' perception of psychotherapy process and outcome:

Question 3: Please evaluate the counseling process and its contribution to the child's recovery, your thoughts, feelings, and actions.

All parents responded with identification of the following counseling variables which they felt contributed to a successful outcome; 1) The providing of reassurance by the therapist appeared to allay the parents' anxiety by suggesting that there was immediate and predictable relief on the horizon. At the point where parents and children attended psychotherapy, anxiety and family disruption was generally at a crisis point. Reassurance

that “soon things would change for the better” often relieved the parent’s anxiety which no doubt contributed to the child’s sense of increased security, at least vicariously. In addition, parents reported that they often entered psychotherapy with a sense of self-blame, in that they were somehow responsible for the child’s anxiety. 2) Self-blame. When parents were informed that this was a chemical imbalance producing a medical condition and they, in fact, were not responsible for a significant aspect of the problem, they seemed to show an immediate and lasting sense of relief. A sense of self-blame on the part of the parent would also no doubt, feed into over-protective behaviors and indulgent practices on the part of the parent. The father of Case #8 responds:

“Her repeated fears and worries were habit to get us to tell her it’s OK so she could feel better. It became a constant thing.”

Parents reported the historical experience of anxiety in themselves. Consequently, significant feelings of reassurance were reported by parents where they informed that they were not to blame and that the same description there was nothing “wrong with the child’s personality”.

Parents were provided with suggestions that the anxiety was affecting the child’s behavior and that this problem was not an integral part of the child’s developmental character configuration. Parents also reported that the primary contribution of psychotherapy to the child’s recovery was; 3) limited reassurance of the child. This involved encouraging parents to reassure children once and then avoid any further reassurances to the child. The purpose of this intervention was to avoid the self-

perpetuating cycle of discussing anxiety, which created thoughts of anxiety, which created further discussions of anxiety.

Specific fears and insecurities represented the actual topical areas whereby parents would continually reassure children. Often, time-out procedures or disciplinary actions were also recommended when children persisted with insecure attachment behaviors as a learned response. This intervention was utilized when they were at least two to three weeks into the therapy process, by which time medications would be taking effect.

4) Disciplinary procedures. Disciplinary procedures provided a structured format in which parents could understand the limitations of their reassuring behavior and help teach the child that neither the parent nor child should continue to draw attention to fears and anxieties. The standard format provided to parents when the child began to verbalize specific fears or attachment worries, was to say the following:

1) “You really do not need to worry or be afraid of this”; 2) “Worrying about this or being afraid of this only makes you feel bad”; 3) “Now that you know everything is OK, we do not need to discuss this or talk about it anymore”.

By utilizing this format, parents were able to respond immediately to the child’s fear with a sense of reassurance. Educational instructions inherent in the procedure informed both the child and parent that there is no real basis for the concern and that the process of expressing concern only distresses the child. Both parents and child were made aware of the desirability of discontinuing the dialogue. For example, the mother in Case #9 responds as follows:

“By using time-outs, I taught her to break the habit of going over and over her fear that I would somehow be hurt. After the time-out she calmed down a lot.”

Parents and children were able to discontinue the cycle of perpetuating anxiety through the discussion of fears. In post-therapy evaluations parents generally indicated that while medication appeared to relieve anxiety, most of the children had progressively developed years of insecure attachment and worry. Consequently, insecure behaviors were the only response available or familiar to the children. As one parent stated,

“My child had learned to behave as a fearful child. I feel that counseling was necessary to help him learn different responses, even though the medicine seemed to relieve the anxiety”.

In this characteristic response, a given parent recognized the combined effect of learned interactive styles and anxiety, wherein medication only addressed the latter. Once again, this interaction addresses the interactive effects of social learning and inherited physiological disorders.

Question #4 was provided as follows:

“How did the counseling process alter your thoughts, actions, and feelings toward your child and his/her problem? Before and after treatment? Please give examples.”

This question was designed to explore the interpersonal aspects of the parent/child relationship relative to the counseling process. Often parents responded once again with initial feelings of relief of responsibility and blame, and the awareness that anxiety on their part or their over-protective, over-indulgent feelings may be perpetuating the child's

insecure attachment and anxiety. In terms of thoughts, parents generally responded with the perception that they could begin to respond in such a way that would allow them to extricate themselves from the anxiety-dependency cycle. Thinking of the child as experiencing a psychological disorder rather than a problem that they “caused”, allowed some distance and reassurance and re-evaluation of the process. An example of this process is evident in the response of the father in Case #3:

“When all this started, I thought he was afraid at night because I worked a lot of nights. It was a relief to know I didn’t cause it.”

In terms of feelings, parents generally reported a relief of anxiety, a relief of feeling responsible and some level of surprise or insight that their historical anxiety may be coming to bear in terms of how they assist the child in coping with anxiety. In terms of actions, all parents reported that the use of techniques provided in counseling were the actions that were undertaken, although this was a learning curve. Parents usually reported that they had difficulty initially in extricating themselves from the cycle of indulgence, overprotection, and worry regarding the child.

It would seem that all parents were aware of the contribution of psychotherapy in the process of recovery for their children. It should be noted here that in the therapy process per se, approximately two-thirds of every session was spent in consultation with parents, informing the parent of how to respond to the child and thereby using the parent/child relationship as the primary therapeutic milieu in the home environment.

Research objective #4 was utilized to evaluate the child and family perception of the therapeutic process, with accompanying questions.

The following responses from parent participants will function to provide substantive support for the perceived effectiveness of the psychotherapy program utilized.

The mother of an eight-year-old female suffering from OAD, SAD, and multiple phobias responded to the following question: “Evaluate the effectiveness of the medication and your perception of its contributions to your child’s recovery or behavior changes. In Question C, please evaluate the counseling process and its contribution to your child’s recovery.”

“The entire program was very effective in a short time. The counseling had to be there to undo the behavior patterns with discipline, limits, and we gained an understanding of how anxiety in the child influenced our behavior, both our child and ourselves as parents. We learned how to help confront the fears learned during the anxiety periods.”

This same parent was asked to evaluate the effectiveness of the therapy program in terms of their thoughts, feelings, and actions.

“Our thinking is that this program provided us with control over the problem. As a result, we feel more confidence as parents and in turn through our actions we stopped reasoning with our child endlessly because it only seemed to reduce her stress temporarily and made her more dependent upon constant reassurance. We learned to help her confront the source of her fears, rather than protect her from the fears. Our earlier efforts at protecting her seemed to make her more insecure and clingy.”

When the child was seen individually, the emphasis was placed on encouragement and pointing out to the children how much better they feel in terms of reducing fears when they endeavor to “be brave”. Finally, it could be said that the psychotherapy process was focused at the level of the parent/child dyad, primarily mother/child, and utilized basic behavioral education techniques. It could also be said that while medication addressed issues of chemical imbalance, psychotherapy would address issues related to faulty relational learning.

It is apparent in this participant’s response that the combined effects of medication and counseling were perceived as effective and necessary to the child’s recovery. It is clear that the counseling intervention produced a change in the parent’s perception and thinking regarding the child’s problems, which consequently resulted in a change of affect or feeling, which in turn resulted in a change in the parents actions toward the child’s problem.

In response to the same questions in Case #8, the parents of a nine-year-old female with over-anxious disorder responded as follows:

“There has been a definite, complete reversal of her problems. As a result of the treatment she is more self-confident, there are no indications of explicit fears or over-attachment, she also handles situations and separation very well. She is now remarkably more outgoing than we have ever seen her. We think of her as now able to handle situations without relying upon us at every turn. The feeling is like the joy of having our little girl back.

Our actions involve less oversight and the comfort of giving her more freedom to deal with transitions and unfamiliar situations on her own.”

Once again, the effectiveness of the combined counseling and pharmaco-therapy approach to this problem is evident in this participant’s responses. Additionally, there is a sense that while no longer encumbered by anxiety, the child is free to engage in healthy separation experiences with the consequent effect of feeling mastery over the environment and a greater sense of security. Also indicated in the preceding response was the issue of trusting the child abilities suggests a reduced level of anxiety in the parent regarding the child’s functioning.

In response to the same question in Case #3, the father of an eight-year-old male child with OAD and excessive fears of the dark responds to the same question as follows:

“We learned to deal with the problem by using the behavior strategies.

These strategies seemed to remove the attention and manipulation as part of his reaction to being afraid.”

The preceding example provides an excellent commentary regarding the behavioral sequence involved when increased parental attention to the problem reinforces the anxious behavior.

In response to the same question, in Case #7 the mother of an eight-year-old female diagnosed with severe SAD, OAD, and multiple phobias responded as follows:

“The medication seemed to be a big part in the sudden relief of her fears.

She experienced less anxiety so she did not have to find things to focus her

anxiety onto as a way of coping. The main contribution of counseling is that it allowed us to understand that her anxiety was not our problem and that her fears are a way that she had of trying to cope with an anxiety feeling that she could not control.”

In the preceding example, the participant’s commentary provides excellent illustration of the way in which childhood fears become a way in which the child attempts to control the subjective feeling of anxiety. Once again, changing the parent’s irrational thinking and attributions regarding the cause of the child’s anxiety and their role in the process allows the parent to experience the objective distance necessary to intervene effectively to help the child.

Quantitative Findings and Outcome

In terms of a quantitative analysis of treatment outcome, the Wilcoxon matched Pairs pre- and post-tests were conducted. The Wilcoxon Matched Pairs Test represents a non-parametric analog to the analysis of variance in two sample cases. Pre- and post-therapy evaluations of symptom severity were considered independent data samples. Severity of symptoms was measured on a scale of 0 to 3. Zero represented the absence of the symptom, (1) represented mild levels of the symptoms, (2) represented moderate levels of the symptom, and (3) represented severe levels.

A pre- and post-test on symptoms of overanxious disorder across the entire sample represented the first analysis. A second analysis was conducted regarding a pre-and post-test analysis of symptoms of separation anxiety disorder across the entire sample. Finally,

a third analysis was conducted comparing pre-and post-tests for both symptoms of overanxious disorder and separation anxiety across the entire sample. The results are available in Appendix F.

Regarding symptoms of overanxious disorder, a significant difference was found between pre-and post-test for symptoms of overanxious disorder. Significance was found at the .005 level in terms of a reduction of symptoms of overanxious disorder for the entire sample.

In the second analysis, a significant difference between pre-and post-tests was found regarding symptoms of separation anxiety disorder. It was concluded that this treatment was successful in reducing symptoms of separation anxiety disorder. This improvement was significant at the .005 level. For both overanxious disorder symptoms and separation anxiety disorder symptoms respectively the null hypothesis was rejected, indicating significant effects by treatment.

In the third analysis, a significant difference between pre-and post-tests ratings, combining both separation anxiety and overanxious disorder, was found. The treatment was found to be effective in decreasing both categories of symptoms, with significance noted at the .005 level. Therefore, the treatment was effective in reducing symptoms in both categories across the entire sample.

Based on participants' reports, responses indicate that short-term pharmacotherapy and psychotherapy was perceived as effective in resolving symptoms of SAD and OAD. Controlled studies may be utilized in future work to further validate these findings.

Diagnostic Findings

Research objective 7, with accompanying questions, was utilized to support the diagnostic findings.

As mentioned previously, this study was undertaken prior to a change in the diagnostic nomenclature for Childhood Anxiety Disorders between the DSM III and the DSM IV criteria published by the American Psychiatric Association therefore, interviews with maternal respondents was conducted utilizing the DSM III criteria for Childhood Anxiety Disorders. On post-clinical evaluation, mothers were requested to retrospectively report symptom severity prior to and following treatment. A four-point scale was utilized to obtain qualitative estimates of symptom severity on a pre-and post-treatment basis. Diagnostic validity in this sample was assured by two primary influences.

All children were referred by Pediatric physicians who referred for treatment based on the presenting symptom of Anxiety in the private practice. In addition, upon initial presentation in the treatment phase of the subject's experience mothers were interviewed utilizing the DSM III criteria for Anxiety Disorders. All children met the DSM III criteria for significant Anxiety Disorder as a condition for involvement in the study. Finally, in the research phase of the follow-up qualitative interview, mothers were interviewed utilizing the DSM III criteria as a pre-and post-measure. There was no apparent variation in mothers pretreatment estimates of initial symptoms severity between the pretreatment phase and the research follow-up phase, based on casual observation of the ratings.

This finding would tend to suggest that estimates from mothers were durable over time, at least regarding the child's severity of symptoms prior to treatment. In some cases as much as a year had transpired between treatment and research follow-up with no noticeable deterioration in the mother's pre-treatment symptom severity estimates. These diagnostic evaluations included both pretreatment diagnostics and research pre-and post-diagnostic criteria. In addition, these diagnostic criteria and ratings of severity were evaluated in a pre-and post-treatment format using Wilcoxon (1945) Match Pairs Statistical Procedure. The results of quantitative statistical analysis are evaluated in the psychotherapy outcome section of this paper. Results may be found in Appendix F.

Co-Morbidity

Research objectives 2, 3, 4, and 7 were utilized to explore this section, along with accompanying questions. This section will discuss co-morbid disorders found in these participants. The high levels of co-morbidity existing between Childhood Anxiety Disorders and the vast array of behavioral/psychological/social disorders that has been reported by numerous researchers in epidemiological studies did not seem to be as apparent in this population. Previous research suggests that the children in this sample were treated on the initial onset stage of the disorders. The sample subjects demonstrated a mean chronological age of 8 years at the time of treatment, with the oldest subject at 12 years of age and the youngest at 5 years of age. According to Cantwell and Baker (1989), SAD and OAD are first diagnosed at a mean age of 7 to 8 years.

The child participants in this study were identified and treated at the earliest onset of the disorders and therefore the question of the development of co-morbid disorders may have become a moot point considering early intervention and treatment.

Previous epidemiological studies evaluating co-morbidity did not evaluate subjects and treatment. These studies demonstrated erratic and small sample sizes, generally included adolescents in the assessment sample. Early intervention into Childhood Anxiety Disorders not only allows for an arrest in the development of the Anxiety Disorder syndrome, it may also preclude the development of co-morbid disorders related to Anxiety if one considers the issue of controlling Anxiety's contribution to co-morbid development.

As mentioned earlier, a significant number of subjects in the sample did demonstrate colic in early infancy, insecure attachment and separation difficulties beginning in preschool as well as social avoidance and withdraw behaviors. Another interesting finding in this sample reveals that 30% of the subjects studied, all female subjects, developed Attention Deficit Disorder without hyperactivity either prior to, during, or just after these treatments for Anxiety Disorder. A co-morbidity rate of 30% corresponds closely with previous epidemiological demographics pertaining to the question of co-morbidity between Anxiety Disorders and ADD in childhood. Ten percent of the sample population here had a known history of learning disabilities.

The issue of Attention Deficit Disorder without hyperactivity was interesting in that all three subjects appeared to demonstrate significant improvement in ADD symptoms while on Imipramine for Anxiety management. It was a generally acceptable procedure among Pediatric community to utilize Imipramine pharmacotherapy in the treatment of ADD or ADHD disorders that do not respond to central nervous system stimulants such as Ritalin. While little theoretical rationale was provided for this practice, it would appear that Imipramine has the ability to mitigate the symptom effects of both Anxiety and the central nervous system activity associated with Attention Deficit Disorder.

A differential diagnosis between the agitating effects of Anxiety and the exaggerated activity level often found in ADD was a complicated question at best. In two of the three children with histories of ADD it was found that the initial effort at medication using central nervous system stimulants such as Ritalin would often trigger the onset of

the Anxiety Disorder. It was also noted that following successful treatment for Anxiety, all three children with a history of ADD demonstrated a relapse or recurrence of ADD symptoms in the context of the stimulating school environment. In all three cases, children were placed back on Imipramine pharmacotherapy at usually twice the previous dose or 50 mgs wherein they demonstrated both relief of Anxiety and ADD symptoms.

These findings suggest that the physiological component responsible for ADD at the level of the central nervous system does in fact exacerbate Anxiety even in children that have been successfully treated and have demonstrated a period of recovery. In the same way that Attention Deficit Disorder was believed to exacerbate Anxiety, it was also conceivable that a recurrence in Anxiety symptoms could in fact exacerbate Attention Deficit Disorder symptoms which in turn exacerbates Anxiety.

One can easily assume a circular relationship between symptom exacerbation and the co-morbid relationship between ADD and Anxiety Disorders. It was clear however that Imipramine pharmacotherapy offered greater control of both disorders than in central nervous system stimulants offered alone. If one considers the role of adrenalin in the ADD complex and its affects as a organic stimulant, it was easy to conceive of the manner in which an organic stimulant could exacerbate Anxiety.

As a consequence of Imipramine treatment for those children with co-morbid, ADD and Anxiety Disorders, these children were often maintained on 50 mg doses of Imipramine per day during the school year alone. Successful titration of Imipramine in these children was noted in the summer when they were taken off of the medications. In

this regard, it was significant to note that the therapeutic effects of Imipramine during the summer months seem to be maintained in these children. No other factors related to physiological co-morbidity were noted in the subjects.

With respect to social avoidance and withdraw, many of these children would fear venturing far from their attachment figures or primary care givers as a result of their peers or anxieties about the world outside. Often turning down sleep-overs or refusal to go to camp or even day events rendered these children vulnerable and susceptible to compromised friendship patterns and social bonds. The Net effect of the child with Anxiety disorder appears to be insecure and over-attachment to the mother at the expense of compromised and underdeveloped social relationships.

One could predict that in a child that remained untreated for Anxiety Disorders, the implications of social disconnection would become pronounced in preadolescence and adolescence. Considering the initial contribution of puberty and hormonal changes, it was easy to imagine how the social consequences of Anxiety disorders in adolescents could be an issue in advanced and severe forms of Anxiety Disorder in adolescence and adulthood.

Pediatric Follow-Up

Questions related to these results may be found in Appendix A.

Pediatric physicians were asked to respond to two specific questions regarding their follow-up medical care of the child participants in this study. Based on an analysis of these responses, there were no indications of relapse of anxiety disorder in any of the children studied. However, as mentioned previously, in the case of children with dual

diagnoses involving ADD/ADHD and anxiety, in every case the child returned to the medication on medical follow-up for the purposes of controlling ADD symptoms alone. However, in children with dual ADD/anxiety diagnoses, endogenous anxiety in the form of OAD and SAD appeared to drop out of the clinical picture.

The Child's Perception of Psychotherapy

Research Objective #4. In the semi-structured interview, children who participated in the study responded to questions directed at the child's perception of psychotherapy. Question #4 begins the exploration for this information.

Question 4) "Do you remember coming to see me before? What was that like? Why did you come to see me?" In Case #8, the child participant responded as follows:

"I was afraid to go to gymnastics and I don't know why, I was never afraid of that before and then I was."

Since research follow-up with child subjects varied depending on the length of time that had elapsed since the child's involvement in psychotherapy, some children had participated in the therapy close to a year prior to the recording of these responses. Other children participated in follow-up within several weeks of the conclusion of psychotherapy. Consequently, memory becomes a factor in the child's recollection of the counseling process. However, all children in this study recalled that the counseling session was "the place that they came when they were afraid". In almost every case, the child was aware that they could associate feeling better (reduced anxiety) with "having no fears". Children were not able to perceive the concept of anxiety as a condition which is

endogenous to the individual; rather, fear for the child was a means of coping with anxiety. Analysis of child responses revealed that the children were unable to associate more than two elements pertaining to the therapy. In this case, the same scenario appears to hold true wherein the child could remember “not feeling afraid” once they attended counseling; however, they could not associate the medication as a third part of the process. Complex associations involving three major contributors appeared to be difficult for the children as concepts for cognitive integration. As a result of my prompting, the children could associate coming to counseling, not feeling afraid, and taking medicine as basic concepts apart from the more complex association of causality of each of these components. Children often remarked that they felt that counseling was a part of feeling better, when counseling was the topic of discussion, they could associate feeling better by that means. All children were able to associate the goal of coming to counseling as “learning not to be afraid”.

Question #7 was presented as follows:

Question 7) “What did we talk about when you came to see me? What did you think and how did you feel?”

Once again this question is not only aimed at determining the child’s perception of counseling process but is also designed to determine thoughts, feelings, and actions related to the issues discussed.

Children could associate the topic of discussing ways of “not being afraid” and “how to be brave” as the primary topic related to therapy. When questioned, “What did

you think?”, children in this study unanimously responded with, “I did not like being afraid”, or “I did not like crying”. Consequently, children reported that “talking about not being afraid makes you brave” and, “when you are brave, you are not afraid.” The following is an excerpt from a particular child’s response associating dialogue and therapy with fear reduction, as a process and outcome in therapy. Universally in this sample, when children were asked, “How did you feel?”, they responded with, “I felt scared”. When questioned regarding the period of time spent talking about being afraid,, the children responded simplistically with, “Then I was not scared”. What appears extremely useful here is a basic sense of attribution in the children, associating discussion in therapy with reduction of fear.

Research objective 4 was utilized to explore the child’s perception of therapeutic outcome, with accompanying interview questions.

The following participant commentary is designed to explore and provide substantive data regarding the child’s perception of psychotherapy outcome. Using Case #7, an 8-year-old female diagnosed with severe SAD, OAD, and multiple phobias, responded to the following question: “Do you remember coming to see me before? How did you feel after you stopped coming here? What did you think? How did you feel? How did you act?”

“I thought everything was gonna be OK and that there was really no reason to be afraid ‘cause I wasn’t afraid anymore. You know, I didn’t feel scared.”

Question: “How did you feel?”

“Good. Not scared . . . Brave . . . I liked being a girl again and I thought it was how girls felt before.”

Question: “How did you act?”

“I could do things on my own, smelling food doesn’t make me sick anymore, and I don’t feel like I need my Mom around me to be OK all the time.”

In the preceding example the child’s perception of the effectiveness of the psychotherapy provides an interesting perspective in terms of the anxiety feelings state being pre-eminent, creating irrational thoughts or fears with subsequent actions involving avoidance and insecure attachment. In addition, the way in which this child’s perception of gender became associated with the anxiety state provides a clear example of how, even in children, anxiety can become generalized to not only other objects, but concepts such as gender and self-esteem as well.

In response to the same questions in Case #6, an adopted male child suffering from over-anxious disorder responds as follows:

“Before I came here, it was like having a monster under your bed, but all the time, I mean, like being afraid of snakes and the dark even when it’s not dark or when there are no snakes. The medicine helped me to be in a better mood and talking to helped me think I could be brave if I wanted to.”

In the preceding example, this child indicates the way in which endogenous anxiety is apparent even in the absence of external stimuli that would otherwise evoke fear. In addition, the child indication that the therapy was effective and that counseling conveyed a sense of mastery in terms of changing the child's perception of the anxiety state was indicated in this example. The preceding child responses validate the effectiveness of treatment based on the child's subjective reports.

Chapter 5

Conclusions

A re-examination of researcher biases

This chapter involves a summation of the more prominent findings rendered from this research study. I begin with a re-examination of researcher biases that were pre-eminent as a fundamental foundation to this study. Eleven researcher biases are identified in the Appendix H.

Researcher bias #1 asserts that childhood anxiety disorders constitute a distinctly different clinical entity than reactive anxiety states.

Rather than mutually exclusive, it could be said that an individual suffering from an endogenous anxiety “trait” is more likely to react to external stressors than an otherwise “normal” individual. Often it was found that external stressors may be identified as triggers for the initial onset of an endogenous state. It was clear however from these data that in many cases developmental precursors or external precipitating stressors could not be identified as marking the onset of an endogenous anxiety disorder. One could delineate exogenous anxiety states from endogenous anxiety traits in that endogenous anxiety continues in the absence of clear definable external stressors following a precipitating event. It could be said that an individual with pre-morbid tendencies toward endogenous anxiety is more sensitive to and has a lowered threshold for external stressors that culminate in an anxiety condition.

Researcher bias #2 assumes that there is a strong biological basis central to the development of anxiety conditions in children and that learned factors operating in the family of origin may determine the specific expression or type of anxious response.

There is evidence of strong support for a biological basis for childhood anxiety disorders involving the serotonergic system. Extended family histories lend support for the unitary model (Last, 1987), which suggests that individual whose ancestors suffer from a variety of mental disorders are likely to develop an anxiety disorder. There is a preponderance of evidence that children who develop anxiety disorders in this study were the offspring of the ancestors suffering not only from anxiety disorders, but depressive disorders as well. In many cases there appears to be a gender-based linkage between the child suffering from anxiety disorder and symptoms experienced in the same-sex parent. It is interesting to note, however, that in many cases both parents had prominent histories of significant anxiety in their childhoods, whether diagnosed or undiagnosed. In addition, a strong linkage between children suffering from anxiety disorders and male ancestors who successfully committed suicide was a striking finding apparent in the data. Oftentimes this ancestor was identified as an uncle on either the maternal or paternal side of the family who had been identified as a suicide victim. One could speculate that in previous generations anxiety disorders in childhood were poorly identified and treated. The possibility that an untreated anxiety disorder in childhood could develop into a depressive and suicidal disorder appears to be a strong possibility.

Researcher bias #3 asserts that a biological transmission of anxiety disorders in childhood can be traced through the maternal side of the family.

This bias did not hold true in that a preponderance of male ancestors of the children studied suffered from clinical conditions, specifically depression. Again, it is interesting to note that the child participant's mother was often the identified caretaker and informant in the research study. Oftentimes it was suggested that the father of the anxiety-disordered child was emotionally unable to cope with and intervene successfully in the child's episodes of anxiety. Strikingly, however, many of the mothers who participated in the study and were generally the informants in the semi-structured interview had significant experiences related to anxiety in childhood, although undiagnosed. More often than not, a particular expression of anxiety in the mother's childhood seemed to translate directly to the idiosyncratic form of anxiety manifested by the child.

Researcher bias #4 asserts that mothers of anxiety-disordered children suffered from anxiety as a child and would often become anxious in focusing and organizing their anxiety around the child's problems. Consequently, an over-protective bond was formed with the child indicative of the mother's over-protective bond to their mother in childhood.

Researcher bias #4 is supported in the data, however, one could argue that mothers as primary caretakers in our society are compelled to comfort, reassure, and intervene on behalf of the child in a natural effort to relieve the child's suffering. It should

be noted that in many cases, the mother's response to the child's anxiety was anxiety-driven and excessively over-protective. In the one case involving an adopted child whose parents did not suffer from childhood anxiety disorder, the pathological or insecure attachment was not noted. The adopted child participant served as a control on the biological influences of anxiety in parents. If one accepts this comparison, it could be said that parental anxiety continuing from childhood serves a contributory function in the development and maintenance of an anxiety disorder in the biological offspring.

Researcher bias #5 assumes that Murray Bowen's generational model could effectively describe the transmission of anxiety within and between generations in this population.

As indicated in Chapter 4, several of Bowen's theoretical tenets regarding the transmission of anxiety in the family do not seem to hold true in the case of anxiety disordered children and their family dynamics. In particular, sibling position and triangulation as a diffusion of spousal dyadic anxiety did not appear to be consistent across all participants. The family projection process, and the effects of anxiety on a compromised differentiation of self in the child appeared to be predominant. There is no doubt, however, that anxious individuals, whether they are children or the parents of anxious children have a tendency to externalize anxiety in an effort to diffuse endogenous anxiety and create a sense of control or mastery over the anxiety. In the context of family dynamics, this process resulted in obvious patterns of co-dependency, over-responsibility, and a mutual circular reinforcement of the anxiety in all individuals. Bowen's contribution

appears to be strong in the area of understanding the interpersonal dynamics involved when anxiety become central to the operation of transactions in the family system. Bowen did not appear to be distinguishing between endogenous anxiety and exogenous anxiety states in his original formulation of his model. It seems that a different set of conditions may apply when one is considering the effects of strictly exogenous anxiety on the development of a healthy sense of self. In other words, individuals with a poorly differentiated sense of self may respond to one situation after another in an anxious manner facilitating dependency upon other individuals in the system. In terms of endogenous anxiety, there are definite interactions that exist between parents and children regarding the mutual contributions of physiological anxiety. There is a circular relationship between endogenous anxiety and learned transactional patterns that occur from generation to generation.

Researcher bias #6 assumes that childhood anxiety disorders are based in physiological imbalances that create dysfunctional transactional patterns between parent and child. This combination of effects can be best described as a term that I coined as the “anxogenetic parent-child dyadic relationship”.

While the data here support the strong interaction between physiological anxiety that is transmitted generationally and dysfunctional transactional patterns, this relationship could be bi-directional. One could argue that dysfunctional transactional patterns that are transmitted from generation to generation could produce a cumulative effect that affects the physiology of an individual in a given generation. The data obtained from this study

would tend to suggest, however, that the physiology of anxiety is pre-eminent to the transactional patterns that develop in families. These transactional patterns are consequently translated from generation to generation. This analysis is viable at the level of micro-analysis in the individual. With many of the participants studied, the data suggested that irrational thoughts and consequent actions stem from pre-eminent subjective feelings of anxiety. Subjective feelings of anxiety could be said to be the core expression of physiological imbalances in the serotonergic system.

Researcher bias #7 asserts that a combination of tricyclic anti-depressants and brief psychotherapy was effective in resolving anxiety disorders in childhood over an average of a 6 to 8 week treatment period.

This assumption was strongly supported by the data. Based on previous research findings, the average dose of 25 mg. of imipramine over a six to eight-week period as utilized in this study is at least 300% less of a dosage than has been reported in a previous study. It should also be noted that the combination of brief psychotherapy and pharmacotherapy was effective on a longitudinal basis in resolving childhood anxiety. Participants were evaluated at varying periods of follow-up subsequent to therapy. Participants in this study were evaluated on outcome measure from between one week to two years following treatment. The average time span between treatment and outcome measurement was fifteen months.

Researcher bias #8 asserts that the dose levels of medication utilized in this study, in combination with psychotherapy, were effective in resolving endogenous anxiety.

Once again, this finding is supported and tends to refute any notion that endogenous anxiety in children must be a chronic condition that extends into adulthood. It is my opinion that when chronic anxiety is untreated, as noted in the ancestors of anxiety-disordered children, the condition may deteriorate into relatively disabling and life-threatening conditions. Last (1989) notes that OAD may become disabling in fifty percent of diagnosed cases. In addition, many adults with psychiatric disorders had diagnosed anxiety in childhood.

Researcher bias #9 suggests that the quantitative method for evaluating anxiety disorders in children has been inadequate to capture a comprehensive understanding of this condition. This study utilized a combination of qualitative methods in order to explore the field in a comprehensive manner. Quantitative statistics were utilized to verify treatment outcome. It is my assertion that endogenous anxiety conditions in childhood should be conceptualized and treated as distinct clinical entities with distinct symptom expressions. These conditions warrant the establishment of specific diagnostic criteria for over-anxious disorder and separation disorder in childhood. While it is true that these disorders left untreated may result in generalized anxiety in adulthood, the clinician faced with dealing with an anxiety-disordered child would be at a loss without a diagnostic map that is specific to the symptoms of these disorders.

Researcher bias #10 suggests that qualitative methods are best suited for the study of these clinical phenomena, considering the complexities of treatment utilizing both chemotherapy and brief psychotherapy.

This remains a strong assertion and the data suggest that much substantive information was provided through qualitative inquiry. From this point it is suggested that experimental design and methodology may be successfully used to further explore and quantify many of the results obtained in this study.

Researcher bias #11 suggests that a paucity of research in this field has been the result of disparities between treatment orientations across professions, the reluctance of society to utilize clinical or experimental pharmacologic approaches with children, and the unreliability of brief self-reports of children.

The self-reports of child participants, their parents, and pediatric physicians were used to provide triangulation and support of these data. While it is clear that society has resisted the clinical study of children involving experimental manipulations and control groups involving withholding medication, this qualitative approach provides ways of studying a complex phenomenon while reducing the iatrogenic effects of the experimental paradigm.

Additional findings

The operation of childhood anxiety may be successfully explained by utilizing either behavioral or object-relations theory. From a behavioral perspective, the data supports the notion that anxious parents attend to the anxious behavior of children, thus reinforcing the anxious behavior through both negative reinforcement of reduced anxiety and attention as a positive reward. Object-relations theory (Mahler, 1975) suggests that healthy separation experiences are essential in the development of healthy individuation

and development of healthy self-esteem. It seems that anxiety in the child and parent disrupts the process of healthy separation experiences, thereby creating dependency and feelings of self-inadequacy on the part of the child and the parent. The child who becomes free of endogenous anxiety feels more secure in their sense of mastery in exploring their world and separating from the parent without distress. Conversely, when the child engages in successful separation experiences, the parent is therefore less likely to intervene on behalf of the child in a protective and enabling manner.

Generational Skipping

Results obtained from extended family data suggest the notion of generational skipping with respect to the severity of symptoms of anxiety disorders. While many of the parents of disordered children appeared relatively free of diagnostic histories for severe and disabling anxiety, it is interesting to note that the children's grandparents often suffered from numerous and varied psychological difficulties. Further studies involving macro-analysis of family systems across a number of generations are needed to understand the complexity of this phenomenon. An interesting endeavor for future research would be to undertake an analysis of the severity of symptoms across generations extending beyond three generations, as in the case of the families studied in this project.

Developmental precursors:

While infant colic and early separation difficulties were apparent in the children studied, it is remarkable that few developmental indicators were noted to precede the onset of endogenous anxiety. Perhaps one avenue for future study involves the fact that

the high co-morbidity rates between childhood anxiety and other disorders such as depression, ADD, and social difficulties could offer new perspectives in evaluating developmental precursors in other domains. The social domain or physiological responses to situational stress would be examples.

Diagnostic Classification

The question as to whether over-anxious disorder and separation anxiety disorder in childhood become generalized anxiety disorder in adults remains unanswered. While the histories of adults suffering from generalized anxiety disorder does not confirm the existence of childhood anxiety in one study (Tyer, 1985), while other studies (Cantwell & Baker, 1989) suggest that the disorder may disappear in adolescence and return in a different form in adulthood. The American Psychiatric Association re-classified overanxious disorder and separation anxiety disorder in the DSM-IV as generalized disorder, the consequences could be considered detrimental to the treatment of childhood anxiety disorder and further research in the field. In the absence of accurate descriptions of the unique symptom manifestations of anxiety in childhood, this re-classification becomes a deterrent to the effective identification and treatment of OAD and SAD in childhood. While the diagnostic label for these disorders has changed, the DSM-III essentially dropped the identifying symptomology that was necessary for informed clinical treatment of children.

Neurological Flexibility

Considering the fact that children in this study showed remarkable recovery with the brief treatment of medication and psychotherapy, it is appropriate to assume that in many cases the physiological functioning of the children studied recovered natural operation following the child's titration from medication. In this way, it is suggested that the medication provided a "jump start" or stimulation of the child's own physiological functioning that had been suppressed in the presence of the anxiety disorder. One could argue that long-term maintenance on these medications could have in fact inhibited the ability of the child's physiological system to reassume healthy functioning. One could also argue that left untreated individuals may lose their ability to respond to treatment with age. This assertion is purely speculative, and it is suggested that this research could be replicated with adults to determine whether age is a deterrent to the individual's ability to assume normal physiological functioning following treatment. I would like to propose that with chronicity and age, a given individual may lose their ability to profit to the same degree from pharmacological or psychotherapeutic treatment. To my knowledge, there is no study available that would claim either a complete remission of symptoms in an adult sample treated for anxiety disorders.

Pharmacotherapy

The idea of low-dose pharmacotherapy of brief duration (four to six weeks) with a gradual titration of at least one week cutting the dose level gradually, appears by all indications to be a novel treatment approach. It is felt that not only the brief period of

pharmacotherapy but the gradual titration of medication is essential in the child's recovery of healthy neurotransmitter functions. The idea of a placebo effect should be addressed. By definition, a placebo effect is the participant's perception that they will improve and consequently may improve by taking a given medication, regardless of the medication's actual level of physiological effectiveness. Placebo controlled studies offer one way of evaluating this effect. As mentioned earlier in this paper, experimental drug studies have traditionally failed to recruit child subjects due to parents' reluctance to withhold medications from children in clinic situations, in need of relief. The researcher must also ask, "What kind of substantive information is gained when the placebo effect operates and both treatment and control group subjects improve?"

This study endeavored to minimize the placebo effect by providing brief and simple instructions to participants that the medication was given to "relieve anxiety" or "reduce nervous feelings". Finally, I feel that with the majority of the participants being evaluated for several months to a year following treatment, a placebo effect would not be expected to endure, given the persistence of anxiety as previously noted in epidemiological studies.

Psychotherapy

In most cases it was obvious that children as young as five years old were capable of understanding basic concepts related to a subjective feeling of anxiety. In many cases young children were also able to conceptualize the idea of feeling afraid as a developmental basis for understanding anxiety. It was obvious from this data that children below the age of nine consistently had difficulty in understanding treatment interactions.

They could easily understand the effects of counseling and talking and its association with “feeling better”. Children could also understand the temporal relationship between taking medication and feeling less afraid. The difficulty arose when children these attempted to understand the interaction of counseling and medication toward the process of “feeling better”.

Behavior management was identified as a necessary component of this psychotherapy in order to break the dependency pattern following the successful resolution of the anxiety in the child. While the child may have become free of endogenous or physiological anxiety, the strong patterns of dependency and insecure attachment that resulted from the anxiety did not appear to diminish automatically with the cessation of medication. The parents were instructed in ways of actively intervening to change the patterns of manipulation, parental attention, and reinforcement that occurred simultaneously with the effects of anxiety. As one parent stated, “Even though she may be free of anxiety, this way of behaving is the only way that she’s known for some time now, and it’s obvious that we must help her break the pattern”.

Parental attention and reassurance function as a negative reinforcement through anxiety reduction at the expense of increased dependency or co-dependency between the child and the parent. Much of the counseling or psychotherapy was designed to break this pattern by allowing children and parents to recognize their emotional state and the way in which it affected their cognition or thoughts about the way they felt. Subsequent to this

therapy, and as a result of relief of anxiety, children and parents were able to follow the instructions and “act differently” in the absence of felt anxiety.

Conclusions Derived From The T-F-A Model

A diagram depicting the inter-relationship between the child and parent reactions utilizing the T-F-A system can be found in Appendix G.

In utilizing the T-F-A model as proposed by Hutchins and Coles (1992), the dynamics of the anxious parent/child relationship become clearly apparent. Based on descriptions by both parents and children, the interactive patterns begin with the child feeling anxious and impulsively translating the anxiety into fear. The pattern of fears usually translates into impulsive and irrational thought processes that “something is wrong”. It could be said that the child’s fears are felt anxieties translated into thought as a way of attempting to control the anxiety. As these thoughts are minimal, impulsive, lacking in rationality, the thought component of the T-F-A triangle is usually minimal or set at 1. Conversely, the anxiety that triggers the pattern is overwhelming in relation to the situation and is registered at a level 3. Consequent to the thought-feeling side of the triangle, the child’s action usually involves an acute and impulsive behavior designed or directed toward fear reduction. It was the overwhelming response of the children studied that the actions in this paradigm are generally attachment-driven (parent-seeking actions to achieve proximity, security, and protection from the parent). The second inter-connecting triangle on the parent side of the equation typically involved anxiety, strong feelings of concern, and feelings of parenting inadequacy as reactions to the child’s highly emotional

actions toward seeking parents and insecure attachment. It could be said that the level of parent feeling which initiated the parents' reaction could be identified as a level 3.

Subsequent to the strong feeling reaction by the parent, parent thought processes are also usually identified as irrational, impulsive, and have to do with feelings of parent inadequacy and a drastic need to help. The level of thought being irrational and impulsive could be considered a level 1 reaction on the thought component of the triangle. Finally, parents' reactions to the child involved reassurance, attention directed at the feared object or concept, and often prolonged efforts to comfort and calm the child.

The T-F-A model provided a conceptual map for clearly and practically assessing the dynamics in the anxious parent/child relationship. In terms of treatment planning, the T-F-A model is also extremely useful in the mapping and planning of cognitive and behavioral affective intervention. The focus of the cognitive and behavioral intervention generally involves substituting or reframing impulsive fear-based ideations with rational and practical conceptualizations of the anxiety and the pattern of interactional reactivity. Consequently, it could be said that anxiety was further reduced in the social system through these therapeutic interventions, reframings and restructuring of thought content in the parent/child dyad.

Conclusions Derived from Bowen's Generational Model

Bowen's model provided a very useful tool for assessing the way in which anxiety is communicated across generations and operates systemically within the family. Several of Bowen's concepts held true, specifically, the nuclear family emotional system,

generational transmission and self-differentiation. The Family projection process, emotional triangles, and sibling position did not appear as essential processes in these families. It seemed from this data that if the marital dyad was strong and intact prior to the acute onset of anxiety in the child, spousal communication remained high and a partnership in helping the child was established without detrimental to the marriage. In some cases, however, when marital problems pre-existed the onset of anxiety in the child, it was often the case that further disruption in the marital dyad was noted. While the data was suggestive of this pattern, this was not a focal point of the study. Further research is recommended into the effects of family crisis on marital cohesion, given an anxious and symptomatic child.

Based on considerations involving the biological and social basis for childhood anxiety, I feel that an appropriate term that could describe the inter-relationship between genetics and generational learning in this population could be the “anxogenic family system”. This term reflects the biological basis for endogenous anxiety which pre-disposes parents and children to interact in ways that manifest protective coping patterns resulting from anxiety. While the physiological anxiety facilitates dysfunctional interaction, it could be said that the dysfunctional interaction conversely facilitates greater felt anxiety and physiological de-stabilization.

Quantitative Conclusions

Statistical analyses using the Wilcoxon Matched Pairs test demonstrated significance pre- and post-treatment measures. According to participant reports and

clinical observation, it could be said that this combination of pharmacological and psychotherapeutic interventions was successful in alleviating endogenous childhood anxiety across both over-anxious and separation anxiety disordered children. Further, it could be said that based on varying degrees of duration between treatment and follow-up, these results indicate longevity in the reliability and effectiveness of the treatment.

Results obtained from physician follow-up inquiries revealed a confirmation of dose levels on children ranging between 25 and 50 mgs. of imipramine per day. Furthermore, results verify no indication of residual anxiety sufficient to facilitate a physician visit, subsequent to treatment.

Conclusions Regarding The Self System

Mahler, Pine and Bergman (1975) assert that if a child is not allowed to experience healthy separation experiences, they have difficulty in developing a sense of self or seeing themselves as separate from their mother. Utilizing Mahler's model for object relations in the healthy separation and individuation of the child, one can easily see the detrimental effects of endogenous anxiety upon healthy separation experiences for the child. Anxiety has a detrimental effect on the child's sense of security in self as well as self-esteem. In addition to arresting the development of healthy separation experiences, anxiety promotes the notion in the child that "they will always receive reassurance, nurturance, and anxiety-reduction when seeking assistance from others". The logical result of the child's quest for reassurance and comfort would be the development of co-dependency and felt inadequacy if the process extended developmentally into adulthood.

Ancestral Suicide

The data in this study support high frequency of successful suicide in the male ancestors of these children. Generally successful suicides occurred in the siblings of the children's parents. By and large the suicidal victims were males or uncles which by all accounts they demonstrated indications of anxiety and depression, formerly known as agitated depression. It is assumed that anxiety and depressive symptoms in the ancestors of these children was sufficient to create psychic distress. However, historically as minor tranquilizers were used to mask or reduce symptoms (Nelson, 1991), often it was said that these symptoms were reduced at the expense of "emotional numbing". Consequently those individuals who did seek treatment, dependency on minor tranquilizers often resulted as a known historical fact. Secondly, it could be said that felt anxiety and depression resulted in individual feelings of inadequacy and these feelings were contradicted in the cultural conceptions of the "strong male". Additionally, it could be said that anxiety prevents the development of trust in the natural world. Problems occur when fears become generalized, and there is a growing awareness that others are unable to relieve our anxiety completely. This observation was derived from the self reports and observations of participants in this study. Co-dependency and social withdrawal as well as avoidance are often the result of untreated anxiety disorders in adults. Agoraphobia is often seen in clinical settings as a pattern of pronounced social avoidance resulting from chronic life-long anxiety. Unfortunately, social withdrawal and avoidance does not foster behavior significant to break the cycle of felt anxiety.

Implications For Future Research

I believe that experimental paradigms and controlled double-blind placebo-based drug studies can easily be constructed from this research to further investigate the properties and qualities of this therapy. It is indicated that a qualitative or substantive basis should be included in experimental studies to capture the full range of subjective experiences on the part of the participant. Anxiety is a subjective phenomenon, and, therefore, participant reports are essential in its measurement and classification. In terms of clinical practice it is clear that anxiety disorders are recoverable and treatable with long-term freedom from remission. Early treatment combining medication and psychotherapy may be essential to recovery.

Future studies involving a hybrid combination of experimental and quantitative methodologies could be utilized in a variety of ways. A focus on specific dose levels using double-blind placebo controls across various age groups could be useful. Qualitative inquiries could be woven into a variety of experimental designs.

In the developmental and longitudinal evolution of co-morbid disorders, searching for precursors and common etiological factors is also recommended. By investigating the developmental, familial, and generational histories of children and adults suffering from ADHD, depression, learning disabilities or related disorders, inter-connections may be identified.

Finally, alternative pharmacotherapies and psychotherapies may be combined for study, utilizing the methodology I have advanced here. It is advantageous to begin

integrating qualitative and experimental methods in order to simultaneously elaborate, add substantive meaning and control variability.

The fields of medical anthropology and developmental science should be united in an effort to establish preventative treatment programs that address the relationships between health and pathology throughout the life span.

APPENDIX A

EXTENDED FAMILY SURVEY (CLINICAL HISTORY)

Instructions: This survey was designed to be conducted with parents in order to collect important information as to the presence of anxiety, depression or other "nervous" conditions in the extended family. Parents are requested to contact relatives, if possible, in order to obtain complete information. Arrangements may be made with the researcher to assist with the cost of long distance phone calls. (responses from both parents if possible)

I. Extended Family Survey

- A. Are you aware of any extended family members including you or your spouse, your parents, grandparents, uncles, aunts, cousins, nephews or nieces who have a history of any of the following problems, treated or undiagnosed: Anxiety, depression, "nervousness", "worry", fears, compulsive or ritualistic behavior patterns, alcoholism, nervous habits or other emotional problems?

Please list family members and provide the most complete description as possible of the problem.

- B. Is there a history of mental health care (counseling) or psychiatric treatment of any known extended family member? If so, indicate the family member by role or position (e.g., siblings, uncle, etc.) and describe the problem and type of duration of treatment.

Please list family members and provide the most complete description as possible.

- C. Is there a history in any known family member of drug usage (prescription, over the counter or illegal) as a means of inducing sleep or reducing stress or nervousness?

Please list family members and provide the most complete description as possible.

- D. Is there a history in any family member of stress- related medical problems, such as but not limited to: Peptic ulcers, Crohn's disease, irritable bowel disease, diverticulitis, migraine headaches, anxiety or panic attacks, torticollis, anorexia, bulimia, insomnia?

Please list family members and treatment and provide the most complete description as possible.

- E. Often family members vary as to how close or distant they are to one another. Please describe the pairs of family members that are the closest with some description of how close they seem to be. Please consider all possible combinations of pairs.
- F. Please provide any relevant information or historical family experiences or legends that relate to relationship problems or mental/emotional stress.
- G. Other relevant family history.

Clinical And Developmental History

Child And Nuclear Family

II. The Child (Oral Presentation)

- A. Please provide a history of the child's emotional and physical development from birth.
- B. Were there any complications in labor and delivery?
- C. Assessment of the child's mood and adjustment in infancy:
- D. Mother's emotional state, mood and adjustment to child's birth:
- E. The child's regularity with sleep and feeding:
- F. Address the level of infant-mother attachment.
- G. Were there indications of postpartum depression or colic in the infant?
- H. Was there any other relevant information regarding the child or family during infancy?
- I. Please describe the child's emotional adjustment during early childhood.
 - 1. Address the level of security:
 - 2. Address the level and quality of attachment:
- J. When did anxiety symptoms first become evident, and how did parents and the family react?

III. The Family (completed by both parents if possible)

- A. Please describe any difficulties you experienced with fears or anxiety in your childhood.
- B. Describe thoughts, feelings, actions in your childhood relevant to your attachment to your parents.
- C. Describe any specific family or attachment difficulties during your childhood. Describe relevant thoughts, feelings, actions.
- D.
 - 1. Please describe marital adjustment prior to the birth of the anxious child or children in terms of thoughts, feelings and actions.
 - 2. Address marital closeness under conflict in thoughts, feelings and actions.
- E. Please describe the effects of the child's anxiety/behavior on the marriage and family in terms of thoughts, feelings and actions.
 - 1. Address conflicts in the marriage and family in terms of thoughts, feelings and actions.
 - 2. Address closeness in the marriage and family in terms of thoughts, feelings and actions.
- F. How did the child's anxiety effect the quality of Parent/Child attachment in terms of thoughts, feelings and actions.

Child Questions

IV. The Child And Family's Perception Of The Anxiety Disorder Relative To Family Relationships And History.

- A. Do you remember when you were afraid a lot - What was that like?
- B. Do you remember when you thought bad things would happen (OAD)?
What was that like?
- C. Do you remember when you were afraid and wanted to stay very close to your mom (SAD)? What was that like?
- D. Do you remember coming to see me before - What was that like? Why did you come to see me?
- E. Do you remember the medicine you took when you came to see me? How did it make you feel? What did you think? What did we do?
- F. How did you feel after you stopped coming here?
- G. What did we talk about when you came to see me? What did you think, how did it feel?
- H. How did you and your mom get along after you stopped coming here?
Was it different with your thoughts, feelings and actions?

V. The Childhood And Family's Perception Of The Therapeutic Process And Outcome Covering Medication And Counseling

- A. Parents - evaluate the effectiveness of the medication and your perception of its contributions to the child's recovery or behavior changes.
- B. Do you recall the dose or time span that the medication was taken?
- C. Please evaluate the counseling process and its contribution to the child's recovery, your thoughts, feelings and actions.
- D. How did the counseling process alter your thoughts, actions and feelings toward your child and his/her problem? Before and after treatment?
Please give some examples.
- E. What did you think, act, feel when you were afraid (OAD) and (SAD) or upset? Give examples.
- F. Child - How did you think, act, feel after you came to see me? Give examples.

VI. Questions For the Pediatric Physician.

- A. Consulting your medical records, please provide your evaluation of the child's diagnosis and recovery from his/her past anxiety disorder.
- B. Have you become aware of any further emotional or psychological symptoms on subsequent visits?
- C. Please confirm the dosage, drug and duration of pharmacotherapy in this child's recovery.

VII. The Family And Child's Perception Of Emergent Pathology Following The Child's Initial Treatment.

- A. Parents - Give an accurate account of any problems, stresses or anxieties in you or your child since their treatment, your thoughts, feelings and actions.
- B. Child - (Subsumed under, previous questions)

VIII. Parents, Please Provide Any Information You Feel Is Relevant.

**IX. Child, Please Tell Me Anything You Want About Yourself Since The Time
You Saw Me, Your Thoughts, Feelings, Actions.**

APPENDIX B

Evaluation: Family Status And Treatment Outcome

The first series of interviews seeks to identify anxiety-related problems among the members of the immediate family (husband-wife and children). These interviews will be conducted as post-clinical interviews regarding the subjects status prior to and following treatment. The way in which anxiety, nervousness and "worry" effects the quality and style of the relationships was also of importance.

The second series of interviews seeks to understand the subjects' views regarding the treatment experience for the child and family. Of specific interest was the use of medication, the counseling experience, and the extent to which the child's improvement affected the style or quality of family relationships.

Series One

(Interview format for respondents)

(from birth)

These questions are a general guide for the researcher and will be worded in a manner that best matches the subject's language styles.

I.

- A. Please describe any developmental indications of anxiety in your children.
- B. What was the effect of this anxiety on family relationships on all dyadic combinations and the family as a whole, specifically mother and child.

- C. Please describe any developmental indications of anxiety in yourself, as well as the effects of anxiety on your relationships with your parents, spouse and children.
- D. Please describe your child's initial symptoms or behaviors that resulted in your pediatrician's referral to this facility.
- E. Interview parents using DSM III-R criteria for OAD and SAD.
- F. Describe the effects of your child's anxiety on your relationship with the child, other family members or the child's relationship with other family members, prior to treatment.
- G. To the extent that you as a parent worry or feel anxiety, how did this interact with your child's anxiety to effect family relationships, prior to and following treatment.
- H. To what extent have patterns of parent/child or family relationships involving anxiety and overprotective feelings seemed to be repeated from your childhood family experiences?

Series Two

(Interview format for child and parents)

- II.
 - A. Note the date and duration of treatment.
 - B. To what extent do you believe that the anti-anxiety medication relieved your child's symptoms (as noted above) and over what period of time?
 - C. To what extent do you believe that your child's recovery was related to the counseling or psychotherapy sessions?
 - D. Can you identify aspects or features of the counseling sessions that resulted in your child's improvement?
 - E. To what extent has your child's recovery continued over time?
 - F. How did family relationships change as a result of counseling and how did these changes relate to your child's continued recovery?
 - G. What relationship changes have occurred as a result of your child's improvement?
 - I. How was your child during, immediately after and since treatment?
 - J. Is there any other change in your child since treatment?

APPENDIX C

BOYS -SAMPLE DESCRIPTION

Case #, Age	Diagnosis	Parents' Employment	Siblings Age	Parent Participation	Family Pathology	Socio- economic Description	Other Data
#1 Age 5	SAD with hysteria & panic on separation, generalized fear	F/computer store owner M/homemaker	sister - 8 yrs.	F-never attended therapy or research	none diagnosed in nuclear family	upper-middle self-described	rapid recovery
#2 Age 5 ½	SAD with severe school phobia, multiple fears	F/contractor M/homemaker	brother 3 yrs.	F-never attended therapy or research	none diagnosed in nuclear family	middle class, self-described	car accident triggered onset
#3 Age 8	OAD with fear of the dark and separation problem	F/media mgr. M/journalist	brother 13 years	F & M attended therapy F - research	F/depression- meds. & counseling	middle class self-described	Jewish by ethnicity, not religious practice
#4 Age 8	SAD with generalized fears	F/contractor M/homemaker	sister 11 years brother 5 years	F & M attended therapy M - research	F/anxiety & depression - counseling & meds. Sister/previous separation anx.	middle class self-described	Boy observed sister's earlier behavior
#5 Age 9	SAD with severe school phobia	F/police officer M/store clerk	no siblings	F & M attended therapy M - research	M/OCD, undiagnosed F/school phobia, undiagnosed	middle class self-described	difficult recovery
#6 Age 9 "adopted"	OAD with possible repressive features	F/teacher M/teacher	no siblings	F & M - attended therapy F - research	none	middle class self-described	child had no developmental history avail.

GIRLS -SAMPLE DESCRIPTION

Case #, Age	Diagnosis	Parents' Employment	Siblings Age	Parent Participation	Family Pathology	Socio- economic Description	Other Data
#7 Age 8	Severe SAD multiple phobias severe OCD & ADD (later, after treatment)	F/media mgr. M/homemaker	brother- 6 yrs.	F & M attended therapy M - research	F/depression, undiagnosed	middle class self-described	Jewish, ethnic & religious
#8 Age 8	OAD with separation problems	F/ environmental government M/teacher	brother 10 yrs.	F & M attended therapy M - research	F/ADD, depression - counseling & meds.	middle class, self-described	chronic marital problems predate treatment
#9 Age 8	OAD with behavior/ compliance problems	F/ photographer M/homemaker	brother 11 years	F did not attend therapy or research M - both	F/depression- undiagnosed	middle class self-described	Behavioral management included in therapy
#10 Age 12	OAD with social withdrawal	F/unemployed M/hairdresser	none	F & M attended therapy M - research	F/history of panic attacks	lower class	significant school improvement

APPENDIX D

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

Informed consent for Participants of Investigative Projects

Parent

Title of Project: A Post-Clinical Evaluation of the Combined Effects of Imipramine Pharmacotherapy and Brief Psychotherapy in the Treatment of Childhood Anxiety Disorders.

Principal Investigator: Daniel B. Porter

I. THE PURPOSE OF THIS RESEARCH - You (parents) and your child were selected to participate in research on childhood anxiety, as a result of your child's participation in counseling at our clinic as a patient.

You are invited to participate in a study about childhood anxiety disorders. This study involves asking questions related to your treatment experience with childhood anxiety as well as questions related to your family medical, clinical, and psychiatric history. This study involves 10 to 15 families in addition to your own.

II PROCEDURES

The procedures to be used in this research are videotaped interviews and examination of medical and counseling records on your child. Videotaping is used because it provides information on the participants' body language, mood, and behavior that may not be available through audiotape record alone. Videotaping provides additional data.

The possible risks or discomfort to you as a participant may be discussing your child's treatment experience.

Safeguards will be used to minimize your risk or discomfort is encouraging your feedback on the interview process.

The Interviews will last approximately 2 hours and will be conducted with parents and the child separately. The interviews will be arranged at your convenience and will be held at Behavioral Science Associates, 3144 Brambleton Avenue.

III BENEFITS OF THIS PROJECT

Your participation in the project will provide the following information that may be helpful:

1. The combined effects of medication and counseling in treating anxiety disorders in children.

Page 2

2. Aspects of family medical, clinical and social history that can predict anxiety in children.
3. The ways coping strategies for anxiety are learned from one generation to the next.

4. Ways that a child's recovery from anxiety affects family relationships.

No guarantee of benefits has been made to encourage you to participate.

Please indicate if you request a synopsis of the results of the study. You may change your mind on this request at any time.

YES

NO

IV. EXTENT OF ANONYMITY AND CONFIDENTIALITY

The results of this study will be kept strictly confidential. At no time will the researcher release the results of the study to anyone other than the individuals working on the project without your written consent. The information you provide will have your name removed and only a subject number will identify you during analysis and any written reports of the research.

The interviews will be videotaped. These tapes will only be reviewed by Daniel Porter, and will be erased after the final review of the tapes or the completion of the study.

*Videotapes will remain in the care of the investigator. No other person will have access to the tapes. Tapes will be stored under lock and key.

*Information gained in this study is strictly confidential, with the following exceptions:

- If the subject is determined to be a danger to him or her self, or to others.
- If child abuse is revealed

*State law requires that incidents of child abuse that are revealed must be reported to the local social services child protection agency. If information is revealed that a person is in danger of hurting themselves or others, immediate professional help will be sought through Respond 24-hour Crisis Service.

V. COMPENSATION

There is no compensation for participation in this project. However, if counseling or medical referral is deemed necessary as a result of the interview process, this will be provided at no cost to the subject. **In this case, subjects will be referred to a licensed mental health provider or to their physician. In the event that a participant requires counseling or mental Health care due to problems resulting from the research interview questions, counseling will be provided to participants at no charge to the participant through the Center for Family Services at Virginia Tech in Blacksburg, all such difficulties resulting from the research must be reported within 2 weeks (14 days) from the participant's interview.

VI. FREEDOM TO WITHDRAW

You may withdraw from the study at any time.

VII. APPROVAL OF RESEARCH

This research project has been approved, as required, by the Institutional Review Board for projects involving human subjects at Virginia Polytechnic Institute and State University, by the Department of Family and Child Development.

VIII. SUBJECT'S RESPONSIBILITIES (THE PARENT)

I know of no reason why I cannot participate in this study.

Parent Signature

IX. SUBJECT'S PERMISSION (THE PARENT)

I have read and understand the informed consent and conditions of this project. I have had all my questions answered. I hereby acknowledge the above and give my voluntary consent for participation in this project.

I, the subject, may withdraw my participation at any time.

Should I have any questions about this research or its conduct, I will contact:

Daniel B. Porter
Researcher
(703)989-5640

Howard O. Protinsky, Ph.D.
Faculty Advisor
(703)231-7201

E.R. Stout, Ph.D.
IRB Chairman
(703)231-9359

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

Informed consent for Participants of Investigative Projects

Parent Permission for Child

Title of Project: A Post-Clinical Evaluation of the Combined Effects of Imipramine Pharmacotherapy and Brief Psychotherapy in the Treatment of Childhood Anxiety Disorders.

Principal Investigator: Daniel B. Porter

I. THE PURPOSE OF THIS RESEARCH - You (parents) and your child were selected to participate in research on childhood anxiety, as a result of your child's participation in counseling at our clinic as a patient.

You are invited to participate in a study about childhood anxiety disorders. This study involves asking questions related to your treatment experience with childhood anxiety as well as questions related to your family medical, clinical, and psychiatric history. This study involves 10 to 15 families in addition to your own.

II PROCEDURES

The procedures to be used in this research are videotaped interviews and examination of medical and counseling records on your child. Videotaping is used because it provides information on the participants' body language, mood, and behavior that may not be available through audiotape record alone. Videotaping provides additional data.

The possible risks or discomfort to you as a participant may be discussing your child's treatment experience.

Safeguards will be used to minimize your risk or discomfort is encouraging your feedback on the interview process.

The Interviews will last approximately 2 hours and will be conducted with parents and the child separately. The interviews will be arranged at your convenience and will be held at Behavioral Science Associates, 3144 Brambleton Avenue.

III BENEFITS OF THIS PROJECT

Your participation in the project will provide the following information that may be helpful:

1. The combined effects of medication and counseling in treating anxiety disorders in children.
2. Aspects of family medical, clinical and social history that can predict anxiety in children.

Page 2

3. The ways coping strategies for anxiety are learned from one generation to the next.
4. Ways that a child's recovery from anxiety affects family relationships.

No guarantee of benefits has been made to encourage you to participate.

Please indicate if you request a synopsis of the results of the study. You may change your mind on this request at any time.

YES

NO

IV EXTENT OF ANONYMITY AND CONFIDENTIALITY

The results of this study will be kept strictly confidential. At no time will the researcher release the results of the study to anyone other than the individuals working on the project without your written consent. The information you provide will have your name removed and only a subject number will identify you during analysis and any written reports of the research.

The interviews will be videotaped. These tapes will only be reviewed by Daniel Porter, and will be erased after the final review of the tapes or the completion of the study.

*Videotapes will remain in the care of the investigator. No other person will have access to the tapes. Tapes will be stored under lock and key.

*Information gained in this study is strictly confidential, with the following exceptions:

- If the subject is determined to be a danger to him or her self, or to others.
- If child abuse is revealed.

*State law requires that incidents of child abuse that are revealed must be reported to the local social services child protection agency. If information is revealed that a person is in danger of hurting themselves or others, immediate professional help will be sought through Respond 24-hour Crisis Service.

V. COMPENSATION

There is no compensation for participation in this project. However, if counseling or medical referral is deemed necessary as a result of the interview process, this will be provided at no cost to the subject. **In this case, subjects will be referred to a licensed mental health provider or to their physician. In the event that a participant requires counseling or mental Health care due to problems resulting from the research interview questions, counseling will be provided to participants at no charge to the participant through the Center for Family Services at Virginia Tech in Blacksburg, all such difficulties resulting from the research must be reported within 2 weeks (14 days) from the participant's interview.

VI. FREEDOM TO WITHDRAW

You may withdraw from the study at any time.

VII. APPROVAL OF RESEARCH

This research project has been approved, as required, by the Institutional Review Board for projects involving human subjects at Virginia Polytechnic Institute and State University, by the Department of Family and Child Development.

VIII. SUBJECT'S RESPONSIBILITIES (PARENT'S PERMISSION FOR CHILD TO PARTICIPATE)

I know of no reason why my child, _____, cannot participate in this study.

Parent or Guardian Signature

IX. SUBJECT'S PERMISSION (PARENT'S PERMISSION FOR CHILD TO PARTICIPATE)

I have read and understand the informed consent and conditions of this project. I have had all my questions answered. I hereby acknowledge the above and give my voluntary consent for my child, _____, to participate in this project.

I may withdraw my child's participation at any time.

Should I have any questions about this research or its conduct, I will contact:

Daniel B. Porter
Researcher
(703)989-5640

Howard O. Protinsky, Ph.D.
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IRB Chairman
(703)231-9359

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

Informed consent for Participants of Investigative Projects

The Child

(Understanding and Approving to be in this study)

Title of Project: A Post-Clinical Evaluation of the Combined Effects of Imipramine Pharmacotherapy and Brief Psychotherapy in the Treatment of Childhood Anxiety Disorders.

Principal Investigator: Daniel B. Porter

I. THE PURPOSE OF THIS RESEARCH - You (parents) and your child were selected to participate in research on childhood anxiety, as a result of your child's participation in counseling at our clinic as a patient.

You are invited to participate in a study about childhood anxiety disorders. This study involves asking questions related to your treatment experience with childhood anxiety as well as questions related to your family medical, clinical, and psychiatric history. This study involves 10 to 15 families in addition to your own.

II PROCEDURES

The procedures to be used in this research are videotaped interviews and examination of medical and counseling records on your child. Videotaping is used because it provides information on the participants' body language, mood, and behavior that may not be available through audiotape record alone. Videotaping provides additional data. *(Videotapes help us understand the questions we ask better.)

The possible risks or discomfort to you as a participant may be discussing your child's treatment experience. *(Treatment is medicine and counseling.)

Safeguards will be used to minimize your risk or discomfort is encouraging your feedback on the interview process. *(Tell us what you think about our study.)

The Interviews will last approximately 2 hours and will be conducted with parents and the child separately. The interviews will be arranged at your convenience and will be held at Behavioral Science Associates, 3144 Brambleton Avenue. *(The times we talk will be convenient to you.)

*Information in asterisk and parenthesis is explanation provided to the child.

III. BENEFITS OF THIS PROJECT

Your participation in the project will provide the following information that may be helpful:

1. The combined effects of medication and counseling in treating anxiety disorders in children.
2. Aspects of family medical, clinical and social history that can predict anxiety in children. *(Asking questions about your family.)
3. The ways coping strategies for anxiety are learned from one generation to the next. *(The way children, their parents, grandparents, and relatives feel.)
4. Ways that a child's recovery from anxiety affects family relationships. *(When a child feels better from worry-the way the family then gets along.)

No guarantee of benefits has been made to encourage you to participate.

Please indicate if you request a synopsis of the results of the study. You may change your mind on this request at any time. *(When the study is over, I will tell you the results if you want.)

YES

NO

IV. EXTENT OF ANONYMITY AND CONFIDENTIALITY

The results of this study will be kept strictly confidential *(private). At no time will the researcher release the results of the study to anyone other than the individuals working on the project without your written consent. The information you provide will have your name removed and only a subject number will identify you during analysis and any written reports of the research. *(We will use a number, not your name, so no one will know you were in the study.)

The interviews will be videotaped. These tapes will only be reviewed by Daniel Porter, and will be erased after the final review of the tapes or the completion of the study.

*Videotapes will remain in the care of the investigator. No other person will have access to the tapes. Tapes will be stored under lock and key. *(I will hide and lock up the tapes so no one will see them.)

*Information gained in this study is strictly confidential, with the following exceptions:

- If the subject is determined to be a danger to him or her self, or to others. *(someone wants to hurt themselves or others)

- If child abuse is revealed *(When people hurt children in wrong ways)

*State law requires that incidents of child abuse that are revealed must be reported to the local social services child protection agency. If information is revealed that a person is in danger of hurting themselves or others, immediate professional help will be sought through Respond 24-hour Crisis Service. *(We have to call for help from other counselors if someone says they want to hurt themselves, others, or children.)

V. COMPENSATION

There is no compensation for participation in this project. However, if counseling or medical referral is deemed necessary as a result of the interview process, this will be provided at no cost to the subject. **In this case, subjects will be referred to a licensed mental health provider or to their physician. In the event that a participant requires counseling or mental Health care due to problems resulting from the research interview questions, counseling will be provided to participants at no charge to the participant through the Center for Family Services at Virginia Tech in Blacksburg, all such difficulties resulting from the research must be reported within 2 weeks (14 days) from the participant's interview. *(You will not get money or prizes for being in this study and if the questions I ask make you feel bad you can tell your parents, me, or your teacher to get free help from other counselors.)

VI. FREEDOM TO WITHDRAW

You may withdraw from the study at any time. *(You can quit anytime.)

VII. APPROVAL OF RESEARCH

This research project has been approved, as required, by the Institutional Review Board for projects involving human subjects at Virginia Polytechnic Institute and State University, by the Department of Family and Child Development.

VIII. SUBJECT'S RESPONSIBILITIES (PARENT'S PERMISSION FOR CHILD TO PARTICIPATE)

I know of no reason why my child, _____, cannot participate in this study.

Parent or Guardian Signature

IX. SUBJECT'S PERMISSION (PARENT'S PERMISSION FOR CHILD TO PARTICIPATE)

I have read and understand the informed consent and conditions of this project. I have had all my questions answered. I hereby acknowledge the above and give my voluntary consent for my child, _____, to participate in this project.

I may withdraw my child's participation at any time.

Should I have any questions about this research or its conduct, I will contact:

Daniel B. Porter
Researcher
(703)989-5640

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IRB Chairman
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APPENDIX E

DSM III-R Diagnostic Criteria

Separation Anxiety Disorder (DSM III-R 309.21)

The age of onset for this disorder was prior to 18 years of age. Children who suffer from anxiety disorder are generally seen as uncomfortable when expected to travel independently away from the home or other familiar areas. Often the child will demonstrate refusal at the possibility or suggestion of visiting or sleeping at a friend's home, attending to errands away from the attachment figure, or when involved in camp or school activities. It was also noted that some cases of school refusal may not be due to separation anxiety per se. Other features associated with SAD involve the inability to stay in a room alone, and the tendency to display "clutchy" or "clinging" behavior, or "shadowing" the major attachment figure around the home when anticipating separation. Somatic complaints such as stomach aches, headaches, nausea, vomiting or other related symptoms are common when separation occurs or was anticipated. Adolescents may experience cardiovascular symptoms such as palpitations, dizziness and faintness, although these symptoms are rarely reported in younger children.

When separation from the major attachment figure does occur, a child with this disorder was often preoccupied with morbid fears that accidents, tragedies or illnesses will befall those to whom the child was attached. This child may often express a fear of being lost and permanently separated from the parent. There was variation in the

content of the child's fantasy regarding the feared separation. Younger children are seen as having less specific or more amorphous fantasies regarding separation. In older children, the fears may become organized around identifiable potential dangers, such as "what if this should happen?" In other children, fears do not generally present as definite or specific threats, but may present as pervasive anxiety about ill-defined danger, tragedy, or death. Anxiety was often anticipatory when separation was imminent or impending. Younger children seem to experience distress more prominently when separation actually occurs. Pervasive fears of animals, monsters and situations are perceived by the child as presenting an imminent danger to the family or to themselves. Concerns regarding dying and death are common in these children, and fears of muggers, burglars, kidnappers, and car accidents are often seen as grossly exaggerated and frequently verbalized by these children.

Often there was a disturbance in sleep, wherein the child has difficulty going to sleep or insists that someone stay with him until he falls asleep. At night or during the course of the evening, the child may make his way into the parents' bed or that of a sibling or significant other. It was very prevalent in the cases of anxiety-disordered children that if entry into the parents' bedroom was barred, they may sleep outside the parents' door. Nightmares involving themes of separation or the child's fears may be prevalent. The expression of the child's fears may vary from apprehension about harm befalling family members, to extreme homesickness, discomfort, misery or panic when away from home. It was further said that these children become preoccupied with

fantasies or reunion with significant others when they are away from home. When away from a major attachment figure, these children may exhibit recurrent episodes of social withdrawal, apathy, sadness, or difficulty concentrating on work or play. In some cases, children with this disorder are said to become violent toward the person who was engaged or participating in the forced separation. Often there was characteristic avoidance or denial on the part of the child to talk about difficulties related to absences from school, sleeping over at a friend's house, time away from family members, or other activities. In adolescents, especially in males, there may be denial regarding the adolescent male's over-concern about his mother or desire to be with her. While this disorder could be said to represent a form of phobia, it was not included among the classification of phobic disorders in childhood.

Associated Features

Fears of the dark are common, as are fixed fears that may seem bizarre, such as eyes in the dark staring at the child. Distressed mood was often present and may become persistent over time. There may also be a concurrent diagnosis of major depression or dysthymia. Children may also be seen by others as demanding, intrusive and vying for constant attention. The child may often complain that no one loves him or cares about him, and he may state that he wishes he were dead, especially if separation was enforced. Other children may be described as unusually conscientious, compliant or eager to please. The child with separation anxiety may appear essentially "normal" in the context where separation was not demanded.

Age Onset

The age of onset may be as early as preschool age (4-5 years). By definition, it was before the age of 18. Onset in adolescence was rare.

Course

Typically there are periods of exacerbation and remission over a period of several years. In some cases anxiety and avoidance regarding separation may persist for years.

Impairment

In a severe form, the disorder may be incapacitating, in that the child may be unable to attend or function independently in a number of areas.

Complication

Often these children undergo elaborate medical examinations and procedures due to numerous somatic complaints. Academic difficulties due to school refusal and social withdraw was often present.

Predisposing Factors

No specific pre-morbid personality disturbance was associated with separation anxiety disorder. The disorder may be precipitated by some life stress event, such as the death of a relative or pet, an illness in the child or relative, or a change in the child's environment such as a change of school or a move to a new neighborhood.

Children with this disorder tend to come from families who are close knit and caring. The ideological significance of this familial pattern was not clear. Neglected children are under-represented among those with separation anxiety disorder.

Prevalence

The disorder was apparently not common.

Sex Ratio

The disorder was apparently equally common in males and females.

Familial Pattern

This disorder was apparently more common in first degree biological relatives than in the general population, and may be more frequent in children of mothers and panic disorder.

Differential Diagnosis

It was essential to rule out pervasive developmental disorder, related overanxious disorder, major depression, and conduct disorder, as well as panic disorder with agoraphobia.

Overanxious Disorder (DSM III-R 313.00)

These children are overly concerned about their competence in a variety of areas, or worry that others will think ill of their performance. Many times the physical component of anxiety was apparent in the child: The child may complain of a lump in the throat, gastrointestinal distress, headaches, shortness of breath, nausea, dizziness or other specific somatic discomforts. Difficulty falling asleep was common, and these children often appear distressed, nervous or tense. Sometimes these children are preoccupied with an adult school figure or neighbor who seems "mean" or critical toward them. As a child becomes older, the preoccupations generally focus around peer group and social functions, as well as academics. If other Axis I disorders are present, the worry and anxiety often extends beyond the focus of that particular disorder.

Associated Features

Social and simple phobias may be present. There may be refusal to attend school due to anxiety. These children often seem hypermature, because of their "precocious" concerns. Perfectionist tendencies, with obsessional self-doubt, may be evident; the child may be excessively conforming or overzealous in the need to seek approval. There may be excessive agitation, motor restlessness or nervous habits such as nail biting, hair pulling or fidgeting. The child may be reluctant to engage in age appropriate activities where there was a demand on performance.

Course

The onset may be sudden or gradual with exacerbations associated with stress. The disorder may persist well into adult life and emerge as an anxiety disorder, such as generalized anxiety disorder or social phobia.

Age Onset

No information.

Impairment

In unusually severe cases, this disorder can be incapacitating and may result in an inability to meet realistic demands at home or in school

Complications

Complications may include unnecessary medical evaluations due to somatic symptoms.

Predisposing Factors

This disorder seems to be more common in the eldest children; in small families, in upper socioeconomic groups; and in families in which there was a concern about achievement, even when the child functions in an adequate or superior level.

Prevalence

The disorder was not uncommon. Most of the children without the additional diagnosis of separation disorder seen in clinical settings are 13 years or older; those with both disorders are usually under 13.

Sex

The disorder was apparently equally common in males and females.

Familial Pattern

There was some evidence that anxiety disorders are more common among mothers of children with overanxious disorder than among mothers of children with other mental disorders.

Differential Diagnosis

There was often some degree of co-morbidity with separation anxiety. Attention Deficit Hyperactivity Disorder may co-exist with the disorder as well. In Adjustment Disorder with Anxious Mood, the anxiety was related to a psychosocial stressor less than six months prior to onset of symptoms. It may be excluded from the diagnosis where psychiatric disorder or mood disorder was present.

The above clinical descriptions were taken from the DSM III-R. Descriptions were not verbatim but were closely aligned with the description provided.

Diagnostic Criteria For Separation Anxiety Disorder

- A. Excessive anxiety concerning separation from those to whom the child was attached, as evidenced by at least three of the following:
- (1) unrealistic and persistent worry about possible harm befalling major attachment figures or fear that they will leave and not return
 - (2) unrealistic and persistent worry that an untoward calamitous event will separate the child from a major attachment figure, e.g. the child will be lost, kidnaped, killed, or be the victim of an accident
 - (3) persistent reluctance or refusal to go to school in order to stay with major attachment figures or at home
 - (4) persistent reluctance or refusal to go to sleep without being near a major attachment figure or to go to sleep away from home
 - (5) persistent avoidance of being alone, including "clinging" to and "shadowing" major attachment figures
 - (6) repeated nightmares involving the theme of separation
 - (7) complaints of physical symptoms, e.g., headaches, stomach aches, nausea, or vomiting, on many school days or on other occasions when anticipating separation from major attachment figures
 - (8) recurrent signs or complaints of excessive distress in anticipation of separation from home or from major attachment figures, e.g. temper tantrums or crying pleading with parents not to leave

(9) recurrent signs or complaints of excessive distress when separated from home or from major attachment figures, e.g., wants to return home, needs to call parents when they are absent or when child was away from home.

- B. Duration of disturbance of at least two weeks.
- C. Onset before the age of 18.
- D. Occurrence not exclusively during the course of a Pervasive Developmental Disorder, Schizophrenia, or any other psychotic disorder.

Diagnostic Criteria For Overanxious Disorder

- A. Excessive or unrealistic anxiety or worry, for a period of six months or longer, as indicated by the frequent occurrence of at least four of the following:
- (1) excessive or unrealistic worry about future events
 - (2) excessive or unrealistic concern about the appropriateness of past behavior
 - (3) excessive or unrealistic concern about competence in one or more areas, e.g., athletic, academic, social
 - (4) somatic complaints, such as headaches or stomach aches, for which no physical basis can be established
 - (5) marked self-consciousness
 - (6) excessive need for reassurance about a variety of concerns
 - (7) marked feelings of tension or inability to relax
- B. If another Axis I disorder was present (e.g., Separation Anxiety Disorder, Phobic Disorder, Obsessive Compulsive Disorder), the focus of the symptoms in A are not limited to it. For example, if Separation Anxiety Disorder was present, the symptoms are not exclusively related to anxiety about separation. In addition, the disturbance does not occur only during the course of a psychotic disorder or a mood disorder.
- C. If 18 or older, does not meet the criteria for Generalized Anxiety Disorder.
- D. Occurrence not exclusively during the course of a Pervasive Developmental Disorder, Schizophrenia, or any other psychotic disorder.

VII. Diagnostic Criteria

69. **Which of the following are considered to be a significant problem at the present time?**

(0 = None; 1 = Mild; 2 = Moderate; 3 = Severe)

- Fidgets
 - Difficulty remaining seated
 - Easily distracted
 - Often blurts out answers to questions before they have been completed
 - Difficulty following instructions
 - Difficulty sustaining attention
 - Shifts from one activity to another
 - Difficulty playing quietly
 - Often talks excessively
 - Often interrupts or intrudes on others
 - Often does not listen
 - Often loses things
 - Often engages in physically dangerous activities
- ___ TOTAL for ADHD _____ (8 or more)

70. **When did these problems begin?** (Specify age): _____

71. **Which of the following are considered to be a significant problem at the present time?**

(0 = None; 1 = Mild; 2 = Moderate; 3 = Severe)

- Often loses temper
 - Often argues with adults
 - Often actively defies or refuses adult requests or rules
 - Often deliberately does things that annoy other people
 - Often blames others for own mistakes
 - Is often touchy or easily annoyed by others
 - Is often angry or resentful
 - Is often spiteful or vindictive
 - Often swears or uses obscene language
- ___ TOTAL for Oppositional Defiant Disorder = _____ (5 or more)

72. **When did these problems begin?** (Specify age): _____

73. Which of the following are considered to be a significant problem at the present time?

(0 = None; 1 = Mild; 2 = Moderate; 3 = Severe)

- Stolen without confrontation
 - Run away from home overnight at least twice
 - Lies often
 - Deliberate fire-setting
 - Often truant
 - Breaking and entering
 - Destroyed others' property
 - Cruel to animals
 - Forced someone else into sexual activity
 - Used a weapon in a fight
 - Often initiates physical fights
 - Stolen with confrontation
 - Physically cruel to people
- ___ TOTAL for Conduct Disorder = _____ (3 or more)

74. When did these problems begin? (Specify age): _____

75. Which of the following are considered to be a significant problem at the present time?

(0 = None; 1 = Mild; 2 = Moderate; 3 = Severe)

- Unrealistic and persistent worry about possible harm to attachment figures
 - Unrealistic and persistent worry that a calamitous event will separate the child from attachment figure
 - Persistent school refusal
 - Persistent refusal to sleep alone
 - Persistent avoidance of being alone
 - Repeated nightmares re: separation
 - Somatic complaints
 - Excessive distress in anticipation of separation from attachment figure
 - Excessive distress when separated from home or attachment figures
- ___ TOTAL for Separation Anxiety Disorder = _____ (3 or more)

76. When did these problems begin? (Specify age): _____

77. Which of the following are considered to be a significant problem at the present time?

(0 = None; 1 = Mild; 2 = Moderate; 3 = Severe)

- Unrealistic worry about future events
 - Unrealistic concern about appropriateness of past behavior
 - Unrealistic concern about competence
 - Somatic complaints
 - Marked self-consciousness
 - Excessive need for reassurance
 - Marked inability to relax
- ___ TOTAL for Overanxious Disorder = _____ (4 or more)

78. **When did these problems begin?** (Specify age): _____
79. **Which of the following are considered to be a significant problem at the present time?**
(0 = None; 1 = Mild; 2 = Moderate; 3 = Severe)
- Depressed or irritable mood most of day, nearly every day
 - Diminished pleasure in activities
 - Decrease or increase in appetite associate with possible failure to make weight gain
 - Insomnia or hypersomnia nearly every day
 - Psychomotor agitation or retardation
 - Fatigue or loss of energy
 - Feelings of worthlessness or excessive inappropriate guilt
 - Diminished ability to concentrate
 - Suicidal ideation or attempt
- ___ TOTAL for Major Depressive Episode (items 3-9) = _____ (5 or more)
80. **When did these problems begin?** (Specify age): _____
81. **Which of the following are considered to be a significant problem at the present time?**
(0 = None; 1 = Mild; 2 = Moderate; 3 = Severe)
- Depressed or irritable mood for most of the day x 1 yr
 - Poor appetite or overeating
 - Insomnia or hypersomnia
 - Low energy or fatigue
 - Low self-esteem
 - Poor concentration or difficulty making decisions
 - Feelings of hopelessness
 - Never without symptoms for >2 mos. Over a 1-yr period
- ___ TOTAL for Dysthymia (items 2--7) = _____ (2 or more)
82. **When did these problems begin?** (Specify age): _____

APPENDIX F

WILCOXON SIGN RANK TEST FOR 10 SUBJECTS (PRE- VS. POST-TEST)

LEVEL OF OAD SYMPTOMS

Child S	PRE	POST	DIFF	RANK OF DIFF	RANK W/LESS FREQUENT SIGNS
1	14	0	14	9	
2	21	6	15	10	
3	11	3	8	3.5	
4	12	8	4	1	
5	16	6	10	5.5	
6	10	0	10	5.5	
7	14	7	7	2	
8	15	7	8	3.5	
9	18	5	13	8	
10	12	0	12	7	

$P_1 = \text{Pre-test}$ $H_0: P_1 = P_2$ $T = 0$ $P < .005$
 $P_2 = \text{Post-test}$ $H_a: P_1 > P_2$ $TCV = 3$ Reject Null

WILCOXON SIGN RANK TEST FOR 10 SUBJECTS (PRE- VS. POST-TEST)

LEVEL OF SAD SYMPTOMS

Child S	PRE	POST	DIFF	RANK OF DIFF	RANK W/LESS FREQUENT
1	15	0	15	4	
2	19	1	18	6.5	
3	26	4	22	10	
4	24	6	18	6.5	
5	18	4	14	3	
6	10	2	8	1.5	
7	11	3	8	1.5	
8	18	2	16	5	
9	23	3	20	9	
10	20	1	19	8	

$P_1 = \text{Pre-test}$ $H_0: P_1 = P_2$ $T = 0$ $P < .005$
 $P_2 = \text{Post-test}$ $H_a: P_1 > P_2$ $TCV = 3$ Reject Null

WILCOXON SIGN RANK TEST FOR 10 SUBJECTS (PRE- & POST-TEST)

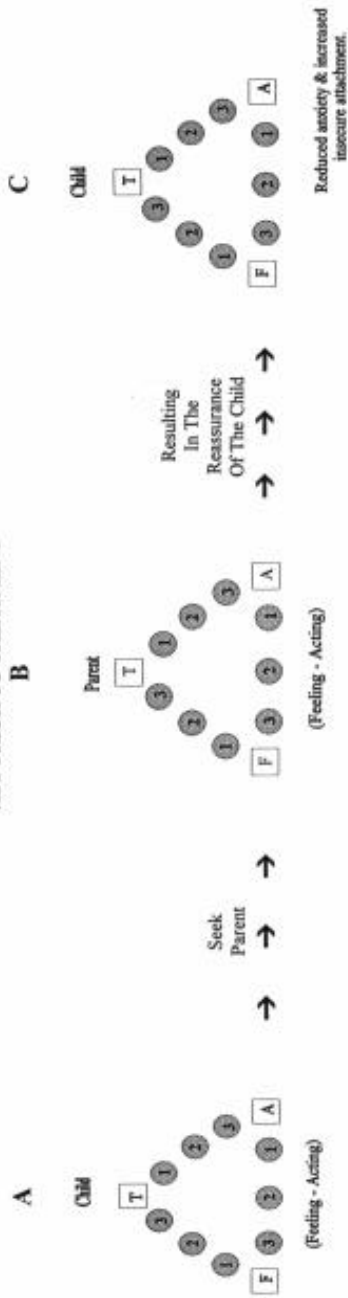
LEVEL OF OAD & SAD SYMPTOMS COMBINED

CHILD	PRE	POST	DIFF	RANK OF DIFF	RANK W/LESS FREQUENT
1	29	0	29	6	
2	40	7	33	9.5	
3	37	7	30	7	
4	36	14	22	3	
5	34	10	24	4.5	
6	20	2	18	2	
7	25	10	15	1	
8	33	9	24	4.5	
9	41	8	33	9.5	
10	32	1	31	8	

P_1 = Pre-test $H_0: P_1 = P_2$ $T = 0$ $P < .005$
 P_2 = Post-test $H_a: P_1 > P_2$ $TCV = 3$ Reject Null

APPENDIX G

T-F-A CONFIGURATIONS
IN THE ANXIOUS PARENT/CHILD DYAD
ADP PRIOR TO TREATMENT



Parent-Child Triads represent interconnected processes. A - the pattern is initiated with high feeling content (1) or anxiety by the child. B - the parent reacts to the child's anxiety with guilt feelings and acts (3) to reassure the child. In both cases, A & B, thought content is non-rational and actions are dominated by feelings (anxiety, guilt). C - the result is reduced anxiety [F], Fear [T] and parent-seeking [A] in the child. The pay-off becomes reduced anxiety in the child and reduced guilt in the parent. The trade-off becomes dependency in the child and overprotection by the parent, as a result of an increased probability the child will seek the parent in the future for anxiety reduction.

APPENDIX H

Researcher Biases

As previously noted, a careful evaluation of researcher biases was fundamental to the process of qualitative research. Objectivity was measured through a careful accounting of the researcher's preconceptions or biases. The following represents my effort to account for fundamental biases that have guided my inquiries into this field of study.

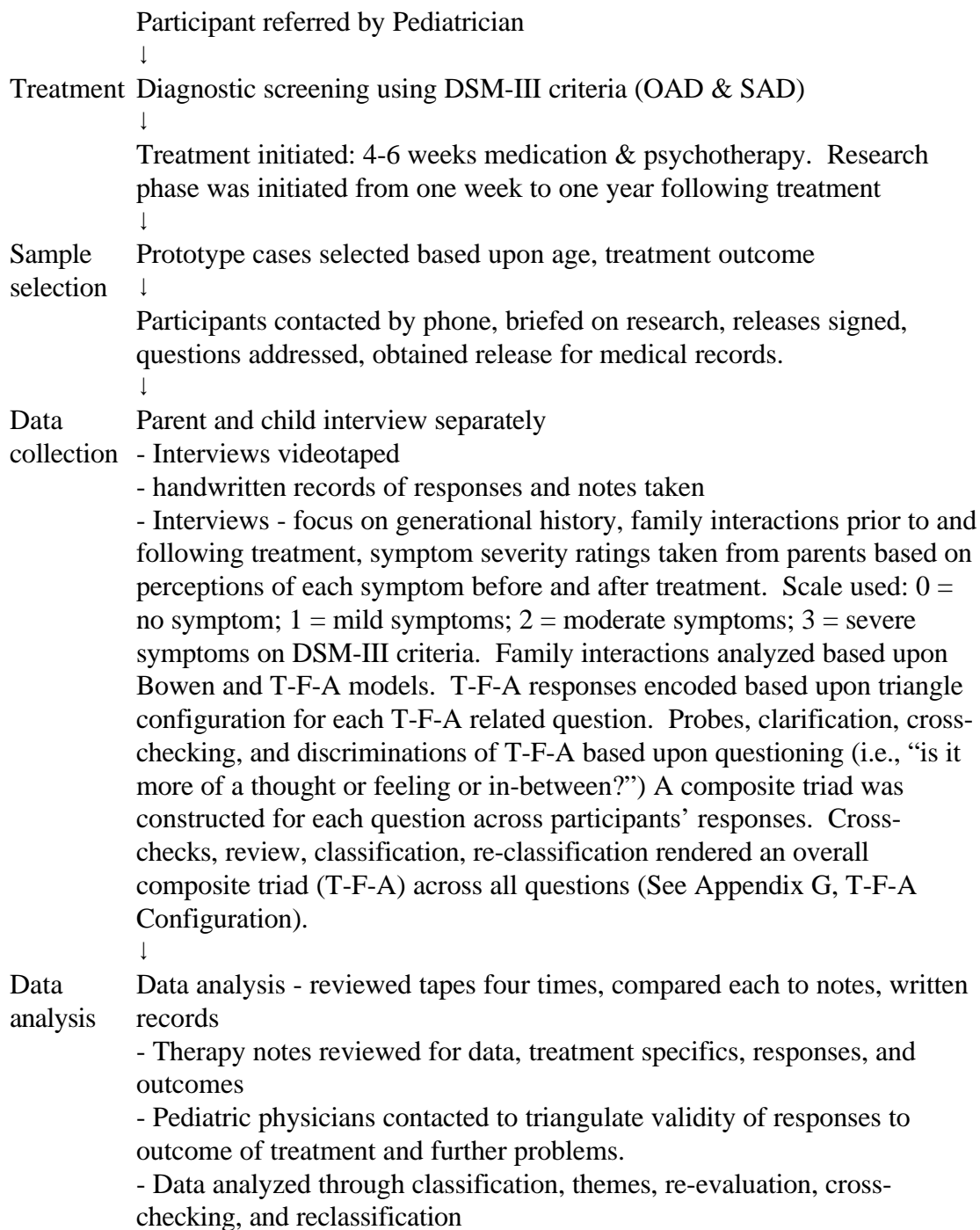
1. As a function of my seventeen years as a child clinician, I view childhood anxiety disorders as distinct, but not mutually exclusive of, reactive anxiety or anxiety states that results from environmental stress and situational factors.
2. Childhood anxiety disorders are grounded in a genetically-based in the serotonergic system, but was effected by and has effect on other neurotransmitter systems.
3. The primary line of genetic transmission of childhood anxiety disorders may be traced through the maternal side of the family. Family history should reveal this belief.
4. The mothers of anxiety disordered children suffer from anxiety, which was focused and organized around the child's anxiety through an overprotective bond. These mothers have most likely experienced this anxiety as children in an overprotective bond with their own mothers.

5. Murray Bowen's generational model best describes the transmission of anxiety within and between generations. Bowen's theory accounts for family relational difficulties resulting or based in anxiety in the social system.
6. Childhood anxiety disorders are based in physiological imbalances that create dysfunctional transactional patterns between parent (mother) and child. This combination of effects can best be described as the "Anxogenic Parent-Child dyadic relationship".
7. A combination of tricyclic antidepressants and brief psychotherapy was effective in resolving childhood anxiety disorders over an average of a six to eight-week treatment period.
8. Imipramine at a dose level of 25 mg per day for younger children and 40 to 75 mg for adolescents was the medication and dose of highest effectiveness.
9. The experimental method has proven inefficient and inadequate in the measurement or description of childhood anxiety disorders. The experimental method has not stimulated research in this field.
10. Qualitative research methods are best suited for the study of these clinical phenomena considering the complexities of treatment utilizing both chemotherapy and brief psychotherapy.
11. A severe paucity of applied clinical research was the result of the following:
 - A. Disparities between treatment orientations across professional disciplines.

- B. A reluctance in society to utilize clinical or experimental pharmacologic approaches with children.
- C. The belief that the self-reports of children are unreliable and would therefore clutter outcome studies.

APPENDIX I

DETAILED METHODOLOGY FLOW CHART



↓

- Three Wilcoxon Sign Rank Tests performed on responses to DSM-III diagnostic criteria for OAD & SAD symptom severity (previously described under symptom severity). One test on OAD symptoms (Pre- and post-), one test on SAD and OAD symptoms for each participant
- Researcher biases re-evaluated
- Responses to Bowenian questions evaluated based on Bowen's Generational model, using Bowen's six systemic concepts (the differentiation of the self, the nuclear family emotional system, the family projection process, emotional triangles, the intergenerational transmission process, and the influence of sibling position).

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Administration. Radford University, Radford, Virginia. Major Paper: "The Effects of
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1976-1977.

B.S. in Psychology, Old Dominion University, Norfolk, Virginia. 1971-1974.

Tidewater Community College (transferred). Liberal Arts major. Portsmouth, Virginia.
1970-1971.

PROFESSIONAL OFFICES

President, New River Clinical Counselors Association; Board Member, Virginia Association
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Consultation, Assessment and Intervention in child,
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Provision of clinical services to children referred by
pediatricians or school systems. Full range of
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Licensure supervision for professionals, child,
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Hypnosis and behavioral medicine; Employee
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Professional Mediation and
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Provide corporate mediation to commercial firms in
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Psychological assessments to in-patient psychiatry
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Psychological assessments, group, individual and
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Registered Psychological Assistant Associate– Lewis Armistead, Ph.D. Licensed Clinical Psychologist Roanoke, VA 1979-1981.	Complete psychological evaluations for Disability Determination Services.
Assistant Professor Virginia Western Community College Roanoke, VA 1979	Instructor of Psychology. Courses included General Psychology, Applied Psychology, and Human Relations. Supervised practicum students in Mental Health Technology program.
Part-time faculty instructor New River Community College Dublin, VA 24084 1977-1978	Instructor of Psychology. New courses included General Psychology, Applied Psychology, and Human Relations.
Director, Counseling Service New River Community Action Agency Christiansburg, VA 24073 1978-1979	Developed psychological services program for community agency serving low-income unemployed people. Consultant to teachers and social workers of Head Start program, shelter for battered women and their children.
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Certified Hypnotherapist; American Society of Clinical Hypnosis

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