Parental Personality Disorders, Family Dysfunction, and Psychological Disturbance in Children

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LOYOLA UNIVERSITY CHICAGO

PARENTAL PERSONALITY DISORDERS, FAMILY DYSFUNCTION, AND PSYCHOLOGICAL DISTURBANCE IN CHILDREN

A DISSERTATION SUBMITTED TO THE FACULTY OF THE DIVISION OF THE SOCIAL SCIENCES IN CANDIDACY FOR THE DEGREE OF DOCTOR OF PHILOSOPHY DEPARTMENT OF PSYCHOLOGY

BY

PEGGY WINGO

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and families. Their comments contributed not only to the hypotheses but to my interpretation of the study's results.

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VITA

The author, Peggy Wingo, was born on April 21, 1960 in Chicago, Illinois. She attended the University of Illinois at Champaign-Urbana from 1978 to 1982. Psychology was her major field of study, and her minor was in English. Ms. Wingo graduated magna cum laude with a Bachelor of Arts degree and was elected to the Phi Kappa Phi and Phi Beta Kappa honor societies.

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This study examines a population of urban children and assesses the functioning of their parents and families, as well as of the children themselves. The investigation focuses solely on a clinical population. The intention of the study is to describe more clearly the types of families presenting their children for treatment, so a control group was not included. Comparisons are made within this clinic population in order to identify and describe a particularly impaired sub-group of families who frequently present for treatment. This sub-group, families with a character disordered parent, are a challenge for treatment providers, due to the relative intractability of the parent's disorder. As will be discussed below, the chronicity of parental personality disorder places children at greater risk for a more severe course of psychological disturbance and a poorer prognosis.

It is hoped that information from the following study will provide a stepping stone to further research, such as investigations of different clinical interventions with character disordered parents and their outcomes. Over time, research on families with personality disordered parents
should contribute to our knowledge of psychotherapy innovations and effectiveness, while ultimately benefitting emotionally disadvantaged children.
CHAPTER I
INTRODUCTION

Background

Theoretical models of psychopathology in children stress the importance of the family environment to the appearance and maintenance of symptoms (Hetherington & Martin, 1992; Minuchin, 1974; Scharff, 1989). Within family systems, the relationship to the parent is believed to be the most meaningful and fundamental to the child's emotional health and well-being (Mahler, Pine, & Bergman, 1975; Stern, 1985; Winnicott, 1958). The strength of the adult "subsystem" and a parent's mental health determine to a great extent what resources will be available to help the child develop to his or her full potential.

A large body of epidemiological and longitudinal research has implicated parental psychopathology as a significant factor that places children at risk for emotional and behavioral disorders (e.g., Hare & Shaw, 1965; Holahan & Moos, 1987; Kellner, 1963; Rae-Grant, Thomas, Offord, & Boyle, 1988; Rutter, 1966; Seifer & Sameroff, 1982). The National Institute of Mental Health (1990) has concluded that children and adolescents of mentally ill parents are at particular risk for psychological disorder.

The social magnitude of this risk can, in part, be
assessed by considering the rate of psychiatric disturbance that occurs on the average among adults throughout the United States. Epidemiological studies in recent years have reported that approximately 14% of men and 12% of women experience an Axis I, clinically diagnosable disorder in a six month period (Weissman, 1987). The average rate is even higher for adults from 18 to 44 years, the ages during which child birth and child rearing are prominent activities for many. The lifetime prevalence rate of Axis I disorders is somewhere between 26 and 34%, across the United States (Robins et al., 1984).

The association between parental disturbances and emotional problems in children has been noted in clinical observations since the early part of this century (Janet, 1925). A fairly large body of research has ensued from anecdotal descriptions in which mental disorders in parents were seen as having adverse effects on family interactions and child functioning. Subsequent studies of the connection between parent and child psychopathology have tested the validity of heuristic judgments about the frequency and strength of their association. By now, several aspects of the relationship between parental and child disorders have been documented consistently, and are, therefore, recognized widely among researchers, theoreticians, and practitioners in mental health-related fields.

Although parent-child co-morbidity (i.e., disorder in
both parent and child) research has been thorough and well-systematized with regard to some psychological disturbances, empirical studies of certain diagnostic categories are surprisingly lacking. In particular, the co-morbidity of adult personality disorders and emotional maladjustment in children has been conspicuously under-researched. The dearth of studies on personality or Axis II disorders may be attributable to skepticism historically held by the field of psychiatry regarding the definition and classification of these chronic disturbances (Tyrer, Casey, & Ferguson, 1991). While such skepticism was valid, many experts believe that recent improvements in standardized diagnostic criteria are increasing the precision of personality disorder categorization and research (Millon, 1984; Tyrer et al., 1991).

This deficiency in the literature on Axis II disorders will be addressed by the following study, which is an exploratory investigation of the relationship between child dysfunction and parental character disorders. This study is an empirical test of an intuitive and clinically-based judgment that psychological impairment in children is associated with personality disorders in parents at a relatively high rate.

The approach of this study is better understood in the context of the literature to date on the relationship between parental and child psychopathology. Empirical
investigations of these correlations have taken two general forms. Klein and Last (1989) have labeled these methodologies "top-down" and "bottom-up" research designs, depending upon whether the childhood or adult psychiatric disorder defines the group studied.

Top-down studies select a clinical population of adults and examine the functioning of their children. The two disorders that have been most extensively researched in this manner are schizophrenia and depression. Many of the earlier studies that used this top-down approach were focused on schizophrenic parents and their children, sometimes comparing them to both depressed and normal-control samples, (e.g., Cohler, Grunebaum, Weiss, Hartman, & Gallant, 1977). Another population that has been studied with the top-down methodology is children and mothers with anxiety disorders (Berg, 1976; Turner, Beidel, & Costello, 1987). In recent years, the most thoroughly researched top-down population seems to be depressed parents and their children (Downey & Coyne, 1990). These studies describe the kinds of impairments found in children whose parents have been diagnosed with some form of affective disorder.

Another approach to examining the relationship of psychological dysfunction in parents and children is to begin with children suffering from general behavioral problems or specific disorders, and to assess the parents for various types of mental illness. Klein and Last (1989)
call this the "bottom-up" method, in which the child's disorder is the criterion subject variable and identifying the most common adult psychopathology correlates is the goal. This research design has been used in the study of childhood anxiety (Gittelman-Klein, 1975), attention-deficit (Biederman, Munir, & Knee, 1987; Stewart, DeBlois, & Cummings, 1979), oppositional-defiant (Frick et al., 1992), and conduct disorders (Lahey et al., 1988).

Under the top-down and bottom-up methods of research, there is considerable variation across studies as to the dependent variables being explored. Each study begins with a particular clinical population and examines pre-designated forms of dysfunction in the subjects' family members or environment. The measures of dysfunction under investigation range from diagnostic assessments of family members (e.g., Laroche et al., 1987) to qualitative evaluations of mothers' interactions with their children (e.g., Gordon et al., 1989). Studies that emphasize the former approach, clinical diagnosis of the family members, are often referred to as concordance studies. These investigations identify the frequency of co-morbidity in children and parents for one particular disorder, such as depression (e.g., Merikangas, Prusoff, & Weissman, 1988).

Much of the literature on the relationship between parental and child psychopathology explores more than the co-occurrence of diagnoses. Factors that reflect the
quality of relationships within the family or degree of family stress are often examined, as well. Research such as the mother-infant interaction studies mentioned above attempts to separate the "interpersonal context" factors (Downey & Coyne, 1990) that may account for the co-occurrence of parent and child dysfunction. Among the variables that have been investigated as potential "risk factors" for child psychopathology are poor parenting (e.g., Burbach & Borduin, 1986) and marital discord (e.g.; Rutter & Quinton, 1977).

This study follows the bottom-up research model, meaning that it originates out of a population of children who have been identified as having an emotional disorder. It includes diagnostic and behavioral assessments of both parents and children. The study is distinctive in three respects. In contrast to concordance research that focuses on one or two diagnostic categories, many subtypes of adult psychopathology are examined in this study. The current prevalence of a broad range of parental psychiatric disorders will be identified in this particular population, an urban, low socio-economic status, largely minority and single family population who have presented their children for treatment. Parents are assessed for a wide range of psychological disorders and children for a variety of behavioral and emotional symptoms.

Second, in contrast to research on parental depression
a disorder that can be of relatively short duration -- this study focuses particularly on parents' personality disorders, which by definition are long-standing. Affective disorders in parents will be identified and analyzed as well, so that their correlates can be compared to those of the Axis II disorders. Therefore, this study taps into both "state" (mood condition) and "trait" (character disorder) aspects of parents' mental health.

Third, this study also includes an assessment of family functioning. Measures of family adaptation and discord are often absent from concordance research. Having information on all three aspects of child, parent, and family functioning makes this study unusually broad in its scope.

In sum, this bottom-up study begins with a sample of children who have been identified as suffering from clinically significant behavioral or emotional problems. The parents are assessed for a variety of psychological disorders, and severities of family and child dysfunction are then compared across different parental disorders. The primary emphasis of this study is to assess the frequency and covariants of parental personality disorders, because this diagnostic area has received little attention in the literature; however, Axis I disorders such as depression, anxiety, substance abuse, and psychotic conditions are also identified in parents.

As children and families are compared across different
categories of parental disturbance, the data will demonstrate whether certain types or levels of dysfunction tend to co-exist. The dependent variables of child and family dysfunction are determined by both parental and clinician ratings, so that perceptions can be compared.

Purpose

There were several compelling reasons to conduct this research, aside from the obvious objective of resolving questions about the relationship between parent and child disturbance. This study fulfills a mandate for more comprehensive assessment of all three areas of child, parent, and family functioning that was proposed in a landmark publication regarding the emotional abuse of children (Garbarino, Guttmann, & Seeley, 1986). It was suggested by Garbarino and his colleagues that the knowledge gained by comprehensive assessments would be helpful in the prevention or remediation of psychological maltreatment of children.

In addition, the National Institute of Mental Health (1990) has advocated that more psychological research be devoted to children with emotional and behavioral disorders, children at severe social disadvantage, and minorities. The sample for this study includes children from all three of these categories. It will provide needed information on the incidence of specific types of disturbances in an
underserved population of low-income, urban families whose children experience persistent psychological adversity.

Another salient aspect of the sample for this study is that it is composed of a significant percentage of single-parent families. Some experts in the field of child and family therapy are now advising treatment providers of the importance of identifying severe parental disturbance, especially when the family is headed by a single parent (Cradock, Gallo, & Updegrove, 1988). These clinicians have observed that single parent families already suffer from having fewer overall resources than intact families. They argue that effective treatment requires the provision of greater extrafamilial supports for children when the single parent is cognitively impaired, psychotic or severely character disordered (Cradock et al., 1988). This study includes that very population of concern, single parents with character disorders, and may help to shed light on the types of problems experienced by emotionally disturbed children and families of personality disordered single parents.
CHAPTER II
REVIEW OF RELATED LITERATURE

The premise for this study is that psychopathology in children can be expected to arise frequently within the context of psychological disorders in the parents, particularly chronic disturbances such as personality disorders. This idea is founded on both clinical theory and empirical research. The material that follows will first outline some of the theoretical underpinnings for this study, taken largely from object relations and self-psychological models of human development. Secondly, research on the relationship between parent and child psychopathology will be reviewed.

Theoretical Foundations

According to most theories of child psychopathology, childhood disorders are generally believed to arise out of the interaction of several risk factors, including parental mental illness (Rutter & Quinton, 1977). One theory that attempts to explain how forces interact to cause child dysfunction is called the diathesis-stress model. (There are no specific authors credited with this model. For further elaboration of the diathesis-stress theory and how
it might relate to different psychological disorders, see Davison & Neale, 1978) This model proposes that a child is born with a biological, genetic, or constitutional vulnerability to specific forms of mental illness. One or more significant environmental or experiential stressors may then interact with that underlying vulnerability to produce the onset of psychopathology. Within this model, psychological disorders are believed to arise out of multiple risk factors interacting simultaneously. The diathesis-stress model has influenced research on disorders such as schizophrenia, where results have supported the theory that pathology occurs most often when multiple risk factors, including parental psychopathology, interact (see below: Walker, Downey, & Bergman, 1989; Walker & Emory, 1983).

Modern psychoanalytic theories describe in detail the manner in which a mother's "emotional absence" (Bowlby, 1973) or negativity might constitute a key stressor for children. These approaches to the understanding of normal versus disordered child development have focused on the parent's ability to respond appropriately to the child's varying needs and affects (Beebe, 1986; Beebe & Stern, 1977; Kohut, 1971, 1977; Stern 1977, 1983, 1985; Winnicott, 1953, 1958, 1965, 1969). Their premise is that the child's sense of self is, from the very beginning, shaped by the interaction with the mother (Chessick, 1985). These
theorists in the self-psychological tradition (Kohut, 1971, 1977, 1978, 1984) propose that the mother's empathy or affective attunement with the child, and her ability to ascertain the child's needs, is crucial to the formation of the child's competence (Ainsworth & Bell, 1974) and object relations (Beebe & Lachmann, 1988).

For instance, Winnicott (1953) argued that deficient maternal empathy creates a kind of narcissistic trauma that damages the child's developing sense of self. It leads to the creation of a "false self" or vulnerable and precocious sense of autonomy and grandiosity (Chessick, 1985). His theory purports that healthy maturation takes place in children when an empathically attuned or "good enough mother" (1958) provides the proper "holding" or "facilitating environment" (1965).

Stern (1985) has elaborated on the manner in which mother-infant interaction is the foundation for the child's on-going expectations and patterns of relating to others. Stern's writings have shed light on the infant's subjective experience, his/her sense of self from birth, and the manner in which the "emergent self" further develops through interpersonal experience with the care-giver. He proposed that there are several senses of self, such as the senses of agency, physical cohesion, continuity, and affectivity, that if impaired would disrupt social and psychological functioning. The "sharing of affective states" or the
mother's tendency to mirror and respond empathically to the child's varying affects is the primary vehicle to the development of a sense of a "subjective self". He wrote that:

It is clear that interpersonal communion, as created by attunement, will play an important role in the infant's coming to recognize that internal feeling states are forms of human experience that are shareable with other humans. The converse is also true: feeling states that are never attuned to will be experienced only alone, isolated from the interpersonal context of shareable experience. What is at stake here is nothing less than the shape of and extent of the shareable inner universe. (1985, pp. 151-152)

According to Stern, maternal deficiency in affective attunement leads to "cosmic loneliness", which occurs to varying degrees in character disorders and neuroses. On the other hand, overattunement or "psychic hovering" is experienced by the child as intrusive, leading to delays in the infant's movement toward independence.

Research on the effects of maternal separation and loss has contributed to and validated these psychoanalytic models. These findings have been summarized by Ainsworth (1969, 1973; Ainsworth, Blehar, Waters, & Wall, 1978), Bowlby (1951, 1958, 1969, 1973, 1980), and Rutter (1972). A synopsis of this large body of research will not be attempted here except to note that these studies consistently support the view that the "child's developing sense of inner regulation" (Bemesderfer & Cohler, 1983), or ability to regulate affect and to engage in effective self-soothing, is greatly affected by the parent's physical and
emotional presence. In turn, the absence of these capacities in a child may predict later emotional disturbance.

E. James Anthony (1983) has discussed the process by which a mother's depression might have an impact on her child. He proposed that various affective disorders preclude or disturb the mother's ability to engage in the "mutual imitation" and playfulness that is vital to the child's normal development (Winnicott, 1958). A depressed mother can care for the child's basic physical needs, but she is not able to emotionally comfort the child, due to her own anxiety, anger, or other negative affects. Anthony argued that the infant is affected by the mother's mood state, becoming insecure and enmeshed in her depression. He refers back to Anna Freud's statement that:

It was known in psychoanalysis long before such infant observations that depressive moods of the mother during the first two years after birth create in the child a tendency to depression (although this may not manifest itself until many years later). What happens is that such infants achieve their sense of unity and harmony with the depressed mother not by means of their developmental achievements but by producing the mother's mood in themselves. (1966, p.78)

Anthony also supports his view of the effects of maternal depression on children by citing Margaret Mahler's observations of toddlers during the rapprochement subphase of the separation-individuation process (1966). Mahler concluded that there were significant deficits exhibited by depressed mothers in terms of emotional understanding and
acceptance of their children's behavior at this stage of
development. According to her studies, these parenting
deficits were associated with child characteristics such as
"ambivalent dependency, pathological defense mechanisms, the
turning of aggression against the self, feelings of
helplessness, and the establishment of a specific
vulnerability" (Anthony, 1983, p. 12) to depression.

These formulations do not discount the fact that the
mother's ability to respond empathically may relate to the
child's temperament (Thomas & Chess, 1983; Thomas, Chess, &
Birch 1968) or other innate factors that might make the
child more difficult to manage or parent. Stern (1985)
stated that an infant's capacities to "yoke his diverse
experiences of the social world" are greatly determined by
constitutional or genetic factors. He added that the level
and types of stimulation that are optimal for a child might
vary by temperament. Kohut agrees with this position, as he
noted in one of a series of seminars:

Children respond to maternal stimulation in a variety
of ways. Some children need very little stimulation; others will not respond even when mothers strongly
stimulate (and respond empathically to) them. One may
say that there is something congenital, inherited, an
innate factor that accounts for the very ability of the
child to respond to the varieties of environmental
stimuli. And one may say that the primary narcissism
of the child who does not respond is greater, at one
end of the scale, than the narcissism of the child who
from the outset responds to comparatively small
stimuli. (Elson, 1987, p. 54)

Some psychoanalytic approaches emphasize the mutual
causality of the quality of parent-child interaction, and
the notion that a child's emotional well-being or dysfunction is mutually determined through that interaction (Atwood & Stolorow, 1984; Beebe & Lachmann, 1988; Stolorow, Brandchaft, & Atwood, 1987). Stolorow calls his model an "intersubjective" approach in which the child's and parent's behaviors in turn influence each other (rather than the direction of influence simply going from parent to child). Within this theory, factors such as a child's temperament must be taken into account to understand how the parent-child relationship has been shaped. In addition, the primary care-giver, as part of the formative parent-infant dyad, is crucial to the fostering of the child's optimal adaptation to his or her environment.

The theorists cited above basically hold that psychological dysfunction in parents results in some deficits or impairment in the ability to supply the affective attunement needed by a developing child (Kohut, 1971, 1977). Under this line of reasoning, a variety of psychological disorders in the parent might adversely affect the parent-child interaction. Disorders ranging in severity from psychotic syndromes, such as schizophrenia, to more transient and common afflictions like depression could conceivably disable the parent's attunement.

Personality or character disorders are among those disturbances that may be most detrimental to an adult's ability to parent (Spitz, 1965). They are essentially
characterized by chronic, rigid, maladaptive patterns of interpersonal relationships. In the *Diagnostic and Statistical Manual*, third edition-revised, (DSM III-R), personality disorders are said to reflect different forms of "significant impairment in social or occupational functioning", and are long-term conditions (American Psychiatric Association, 1987).

Theodore Millon has been a highly influential figure in theory, assessment, and research of personality disorders (Millon, 1969, 1984, 1986a, 1990; Millon & Everly, 1985) and, in fact, was instrumental in constructing the personality nosology used in the DSM III and its revision (Millon, 1981, 1983, 1986b). He has proposed that personality itself can be defined as: "a pattern of deeply embedded and broadly exhibited cognitive, affective, and overt behavioral traits that persist over extended periods of time", (Millon & Everly, 1985; p. 4). He draws a distinction between temperament and personality by explaining that temperament is a "biologically determined subset of personality", the latter being derived from a "complex biological-environmental formative matrix", (p. 5).

Millon argued that normal or healthy personality patterns could be distinguished from disordered personalities on the following criteria:

1. ability to cope with "average, daily responsibilities" and relationships in a "flexible and adaptive" versus an inflexible, maladaptive manner.
2. "characteristic perceptions of self and environment" are "fundamentally constructive" versus "self-defeating".

3. "consistent overt behavior patterns can be considered health promoting" versus "health eroding". (Millon & Everly, 1985, pp. 7-8).

Millon identified other characteristics of abnormal or dysfunctional personality patterns. He stated that their limited, uniform defenses tend to foster "vicious cycles" or repetitively self-defeating sequences of events. In other words, their intended coping behaviors often provoke unfavorable consequences for themselves, as well as negative reactions from others.

Another important facet of character pathology is what psychoanalytic theorists would describe as poor ego strength, or lack of resilience in the face of stress. Millon calls this "tenuous stability". He noted that personality pathology is not often immediately obvious but emerges in conflictual or pressured situations, causing the vulnerable individual to regress into primitive defensive patterns and subjective, distorted perceptions of reality (Millon & Everly, 1985).

Millon's "biosocial learning" theory (1969, 1981; Millon & Everly, 1985) proposes that character disorders are syndromes based on eight fundamental, normal personality patterns. Personality disorders are not seen as completely discrete or discontinuous from normal character styles. Rather, they are distorted derivations or pathological
exaggerations of personality traits, caused by a "complex interaction of biological dispositions, maladaptive learning, and especially challenging environmental stressors" (Millon & Everly, 1985, p. 38).

The eight basic, "normal" personality traits identified by Millon are "forceful, confident, sociable, cooperative, sensitive, respectful, inhibited, and introverted". The personality disorders that Millon believes are rather directly related to these traits are anti-social, narcissistic, histrionic, dependent, passive-aggressive, compulsive, avoidant, and schizoid. These eight character disorders are considered by Millon to be mild to moderately severe disturbances. In recent years, Millon has added two personality disorders to his taxonomy, sadistic and self-defeating (1987), which may be seen as variants of existing disorders. That is, the sadistic personality is related to the anti-social character and the self-defeating personality may be related to dependent and avoidant characters (Choca, Shanley, & Van Denburg, 1992).

There are three other personality disorders that Millon describes and that appear in the DSM. They are schizotypal, borderline, and paranoid character disturbances. Millon categorizes these separately, as "severe personality pathologies", in contrast to other forms of personality which exist as basic character "styles" at more balanced levels. These personality disorders are seen as the most
severely pathological of all the character disturbances (Choca et al., 1992; Millon, 1987).

Therefore, Millon separates personality disorders into two general groups. The DSM (third edition and revised), however, presents personality disorders in three clusters. Axis II conditions in this diagnostic manual are seen as related by certain similarities. The first, most severe, group is characterized by odd or eccentric behavior, withdrawal from social relationships, potential for poor reality testing, and minimal object relatedness. The personality disorders in this group are paranoid, schizoid, and schizotypal.

The second group of disorders is characterized by dramatic, emotional, and erratic behavior. Individuals in this cluster are also said to be externalizing and exploitive in their interpersonal relationships. The disorders in this second group are anti-social, borderline, histrionic, and narcissistic personalities.

The third cluster of personality disorders consists of individuals who are excessively anxious and fearful, or "careful" of intimacy (Waldinger, 1984). They tend to be internalizing in their symptomatology. The character disorders in this group are avoidant, dependent, obsessive-compulsive, and passive-aggressive.

Because of their "embedded" and enduring nature, character disorders create particular therapeutic
challenges, in terms of intervention, case management, and prognosis (Millon, 1981; Millon & Everly, 1985). Deficits in interpersonal functioning leave character disordered individuals who are parents at a loss for negotiating the complex and emotionally demanding needs of the child. Children of these parents may then suffer from related emotional disorders or developmental arrests.

For instance, Miller (1981) has described significant parenting deficits that occur among adults with narcissistic personality disorder. She concludes that their children will suffer from depression and narcissistic disturbances as a result. It has also been purported by Masterson (1976) that mothers suffering from borderline personality disorder have great difficulty parenting during the crucial separation-individuation stage of the child's development. Masterson asserts that this parenting failure in turn thwarts the development of the child so that s/he also does not progress beyond the "borderline" level of personality organization.

Finally, the particular impact upon children of parental character disorder has been described by Dr. Maria Piers (1984), a Viennese child psychoanalyst who studied with Anna Freud. There were three distinct levels of emotional adjustment frequently observed for children in her practice. Children of "healthy", consistent parents tended to fare the best, as one would expect. The second most
functional group of children were those whose parents were clearly psychotic, so that their children learned to disregard or discount the parent's behavior and turn to an alternate adult or to their peer group for support and identification. The children who tended to be most disturbed were those with parents whose behavior and emotional state were inconsistent, and unpredictable, (e.g., parents with borderline personality disorder).

Dr. Piers explained this clinically observed pattern by proposing that, when cognitive development is sufficiently achieved, sometime between the ages 4.5 and 6, children of severely mentally ill parents may develop a "contra-identification". In this process, the child will decathect from the parent and seek other bases of self-comparison and nurturance, (i.e., from mentors, such as teachers or scout masters, and from peers). The contra-identification phenomenon is a healthy adaptation or coping strategy for the child.

Dr. Piers found that children of parents with character disorders were most damaged and less able to engage in the process of contra-identification, in a sense because the parent was not clearly "crazy". Discussed in the section below, empirical studies conducted at the Erik Erikson Institute have supported this theory by Dr. Piers, demonstrating that children of psychotic mothers were better able to cathect to other adults in the environment, thereby
lessening their own risk for psychological impairment (Musick, Stott, Cohler, & Dincin, 1981; Musick, Stott, Spencer, Goldman, & Cohler, 1987). It seems that children of mothers with less obvious disturbances, such as personality disorders, may be less likely to seek and experience corrective and growth-promoting self-objects, as they are still attached to and focused upon their 'subtly-impaired' mothers. These children may also be more likely to internalize negative parental feedback and affects.

Empirical Foundations

Research on the co-occurrence of psychological disorders in parents and children will be discussed within the framework explained in the introduction, namely, top-down and bottom-up categorization. Relevant top-down components of the literature can be divided as follows:

1) parental schizophrenia and child correlates
2) parental depressive disorders and child correlates
3) parental anxiety disorders and child correlates
4) parental alcoholism and child correlates
5) parental personality disorders and child correlates.

The second category of research to be reviewed is the bottom-up area, which targets children diagnosed with a psychological disorder and assesses the mental health of their parents. The literature regarding child-to-parent psychopathology correlations is less extensive than that regarding top-down research, and will be covered more briefly in this review. Bottom-up research will be
presented in two parts. The first section encompasses research on general distinctions between clinic and non-clinic families. The second part of this review covers research on specific childhood disorders and their parental correlates.

The top-down and bottom-up lines of research are reviewed and discussed below, with an emphasis on their relevance to the study of personality disorders in parents. To begin, findings from each of the top-down research categories listed above will be summarized.

Top-Down Studies

Schizophrenia

Early concordance research has clearly documented a significantly high co-morbidity rate for this disorder. The literature reflects that children of schizophrenics are at 10 to 15 times greater risk for developing schizophrenia than children in the general population (Seifer & Sameroff, 1982). Moreover, children of schizophrenics have been shown to be at greater risk for a wide variety of psychiatric disturbances, with approximately 50% of these children experiencing some form of clinical disorder at some point in their lives (Hanson, Gottesman, & Meehl, 1977).

In the last 20 years, seven research groups have conducted high risk studies of schizophrenia, comparing level of dysfunction in children to that of offspring of
depressed parents (Downey & Coyne, 1990). Three of these groups used longitudinal studies: the Emory University Project (Goodman, 1987), the Massachusetts Mental Health Center Project (Cohler, Grunebaum, Weiss, Hartman, & Gallant, 1977; Gamer, Gallant, Grunebaum, & Cohler, 1977), and the Rochester Longitudinal Study (Sameroff, Barocas, & Seifer, 1984; Sameroff, Seifer, & Zax, 1982; Sameroff, Seifer, Zax, & Barocas, 1987). Other studies used "school-aged", 6-16 years, child cohort groups of mentally ill parents: the Minnesota High-Risk Study (Garmezy & Devine, 1984; Rolf, 1972; Rolf & Garmezy, 1974) and the Stony Brook High-Risk Study (Weintraub, 1987; Weintraub & Neale, 1984).

The Rochester Child and Family Study examined a child cohort group with subjects as young as four years old (Baldwin, Cole, & Baldwin, 1982; Fisher et al., 1984; Wynne, Cole, & Perkins, 1987) and the St. Louis High-Risk Study targeted offspring as old as 20 years of age (Worland, Janes, Anthony, McGinnis, & Cass, 1984).

In their review of these studies, Downey and Coyne (1990) summarized the findings succinctly:

Despite inconsistencies across measures and samples, the school-aged children of affectively disturbed and schizophrenic parents showed similar deficits in comparison with matched or random control children. Effects specifically associated with either diagnosis were strikingly absent. (p.53)

The findings for infants and pre-school children were somewhat more varied, but the general result was that young children of depressed parents resembled those of
schizophrenic parents in levels and types of impairment, such as social and cognitive deficits and adjustment problems (Goodman, 1987). Both groups were significantly more impaired than control children. As Downey and Coyne pointed out, the most remarkable aspect of these schizophrenia studies is the absence of significant differences between children of schizophrenic and depressed mothers when, intuitively, one might have expected the former children to be more impaired.

In their study of previously hospitalized schizophrenic and depressed mothers, Cohler, Gallant, Grunebaum, and Kaufman (1983) questioned the validity of maternal reports of adjustment by subjects with psychiatric disturbance. Schizophrenic, depressed, and "well" or normal mothers were asked to rate both their own and their children's adjustment in a number of different areas. They found that depressed mothers rated their children as more poorly adjusted on several indices than did schizophrenic mothers rating their own children. The authors suggested that this result may be due to the mood disturbance making depressed women particularly critical of their children. They also stated that the "denial defense", which they consider to be characteristic of schizophrenia, may foster a tendency to underestimate psychopathology in children.

Nonetheless, in blind interviews, the depressed mothers were also rated by clinicians as "showing the greatest
conflict in their children's adjustment" (p.96) as compared to schizophrenic and well mothers. If this "conflict" about the child's adjustment is more evident in depressed parents than schizophrenic parents, then it stands to reason that children of depressed parents may be affected, perhaps becoming more dysfunctional as a result.

The observation made by the clinicians in this study seems to lend plausibility to the assertion that children of depressed mothers might be prone to equal or greater impairment than children of schizophrenic mothers, if only as a result of the depressed parents' ambivalence or pessimism regarding the children's adjustment. The results generated by these maternal reports may then be valid, rather than an artifact of faulty measurement. In addition, Walker and his colleagues noted that several other high-risk studies have used child ratings provided by parents with various forms of mental illness and found them to be valid (McNeil & Kaij, 1984; Rolf, Crowther, Teri, & Bond, 1984; Sameroff, Barocas, & Seifer, 1984; Yu et al., 1984).

As mentioned in the above discussion of Piers' theory (1984), research conducted by faculty at the Erik Erikson Institute has supported the claim that children of depressed mothers often demonstrate more problems in emotional adjustment than children of psychotic mothers (Musick et al., 1981; Musick et al., 1987). This finding was attributed to the fact that children of psychotic mothers
were better able to attach to substitute care-takers than were children of depressed mothers.

Taking the literature as a whole, Downey and Coyne were struck by the general similarity between children of schizophrenic and depressed mothers. They concluded that the co-occurrence of parental and child psychopathology may not be attributable to these specific diagnoses in and of themselves but to related factors, such as family stress or marital discord. They propose that the more dysfunctional among these children may be most affected by "negative, hostile parenting", (p.65), or chronic stress.

Other researchers have made such connections. For instance, the UCLA Family Project investigated "family precursors" of schizophrenia, particularly parental communication style and affect, as well as structure of parental roles. This study found that the combination of "communication deviance" and negative affective style in the parents were predictive of schizophrenia-spectrum disorders (Rodnick, Goldstein, Lewis, & Doane, 1984). Certain patterns of family disorganization were also significant.

These findings suggest that parental disorders that involve difficulties with affect-regulation, especially anger, and long-term family disruption might be particularly detrimental for children. As personality disorders are marked by such deficits, it follows that children of character disordered parents may be at risk for the most
severe level of impairment.

Walker and his colleagues (Walker et al., 1989; Walker & Emory, 1983) have taken a different approach to the study of schizophrenia. They have attempted to isolate the one or more factors associated with the illness of schizophrenia that might put children at risk for the disorder, using the diathesis-stress model described above. In the first study, Walker and Emory (1983) examined prenatal, delivery, birth weight, neurological, motor development, mother-infant interaction, and stress factors related to being parented by a schizophrenic adult. They found evidence for constitutional weaknesses in children of schizophrenics that may be exacerbated by a stressful environment, in part due to the parents' mental illness. They concluded that the data overall support the idea that schizophrenia may have multiple etiologies, reflective of a variety of risk factors, both genetic and environmental.

The second study, conducted by Walker, Downey and Bergman (1989), investigated the effects of parental psychopathology and maltreatment on children. Schizophrenics, a psychiatric group including affective and alcoholic disorders, and a normal control group were assessed for maltreatment of children and further subdivided, creating six cells. Behavior in children across all these groups was compared at two points in time. Child behavior was measured by parent report with the Child
Behavior Checklist (Achenbach & Edelbrock, 1983). The authors found that, while boys from maltreating families were generally more aggressive and delinquent, there was a significant interactive effect with the combination of parental schizophrenia and maltreatment. Children of "maltreating" schizophrenics showed significantly greater increases in acting-out behavior over time, as compared with other groups.

This second study by Walker and his colleagues was weak in failing to describe how "maltreatment" was defined or what criteria were used to determine status in that group. Measuring child behavior via reports by parents suffering from a severe mental disorder is also a subject of controversy (see Chapter V). Nonetheless, this research again demonstrates that there are significant intermediary factors involved in the link between child and parental psychopathology. The study suggests that particular clinical profiles or psychiatric conditions that make parents prone to child maltreatment would place children more significantly at risk for impairment. As personality disorders are defined by deficits in or maladaptive styles of affect regulation, it follows that parents with these disorders may be more vulnerable to lose control of anger and mistreat their children. In addition to possible genetic factors, such a process may cause more frequent or severe occurrence of pathology (e.g., delinquent/anti-social
behavior) in offspring of character disordered parents.

A caveat must be made regarding the schizophrenia literature outlined above. As was mentioned in the introduction to this paper, research on the correlation between parent and child psychopathology varies widely in its methodology, particularly with respect to how child adjustment is measured. This variation often makes it more difficult to compare studies meaningfully or to draw specific conclusions from a few investigations. The validity of some findings should in fact be questioned when derived from non-standardized measures. The research on schizophrenia is no exception to these methodological problems. Great variability in definitions for and ways of measuring dysfunction in children exists in this literature. One might, however, argue that the variation in measures serves to illustrate the robustness of the general finding (Campbell & Fiske, 1959) that children of schizophrenics are at high risk for emotional or behavioral disturbance, but perhaps not more severe disturbance than children of parents with other chronic or recurrent psychological disorders.

**Depressive Disorders**

The correlation between parental depression and psychological disorders in children is perhaps the most thoroughly researched and reviewed area of the co-morbidity literature. Initially, as mentioned above, children of
depressed parents were not of primary concern but were included in high-risk studies of schizophrenia as a control group. This resulted in what Downey and Coyne (1990) refer to as "the serendipitous finding" previously described -- offspring of depressed parents were just as disturbed as offspring of schizophrenic parents, as assessed by parent and clinician ratings.

Depression may have also received great attention among researchers because of its prevalence, as the frequency of clinical depression has been estimated to be, at any given time, approximately 8% in mothers overall (Weissman, Leaf, & Bruce, 1987) and 12% in women who have recently given birth (O'Hara, 1986). Because so many children are exposed to parental depression, the impact of this particular disorder is of great interest to both researchers and clinicians.

Studies consistently find high levels of dysfunction in children of depressed parents as compared to children of normal parents. An early review of the literature summarized 20 studies using both cross-sectional and longitudinal designs (Beardslee, Bemporad, Keller, & Klerman, 1983). Virtually all of the investigations found that children of depressed parents exhibited symptoms and disorders of many types. Studies that included diagnostic ratings as an index of functioning found that 40 to 45% of children of depressed parents (latency age and adolescent) were found to have a psychiatric disorder of some kind.

Among the kinds of symptoms frequently found in these studies of children of depressed parents were affective disorders, conduct disturbances, hyperactivity, adjustment reactions, anti-social behavior, and drug abuse. In his study, Rutter (1966) described the children's disorders as ranging from "neurotic illness" to "neurotic behavior disturbance" to "mixed behavior disturbances" to "conduct disturbance". As discussed in the schizophrenia section above, the reviewers noted that this distribution of disorders was similar to the kinds of impairments found for children of parents with other forms of psychiatric disturbance.

Although there appeared to be little difference between children of depressed parents and children of parents with more severe types of mental illness, one characteristic did stand out. Particularly high rates of affective disorder were found in children of depressed parents. The actual rates of depression varied substantially. For instance, McKnew and his associates (McKnew et al., 1979) reported that 30% of the children in their sample were assessed to be depressed, while Welner and his colleagues (Welner, Welner, McCrary, & Leonard, 1977) found that only 7% of their child sample were diagnosed as depressed. This discrepancy may be
due to several differences in the methodology for these studies, among them the child diagnostic criteria and whether child raters were blind to the parent's mental health status.

In general, these early studies reported that affective symptoms were prominent in children of depressed parents (Greenhill & Shopsin, 1979; Kuyler, Rosenthal, Igel, Dunner, & Fieve, 1980; O'Connell et al., 1979; Weissman & Seigel, 1972; Welner et al., 1977). The frequency of depression was particularly high among older children in the studies. In fact, Garmezy and Devine (1984) found in a follow up study that children who appeared relatively unimpaired between the ages of 9 and 11, or similar to the control group children, showed much greater disturbance during high school years.

Based on the findings above, Beardslee and his colleagues (1983) concluded that "degree of impairment, speed of recovery from illness, or family communication difficulty may be more powerful predictors" (p. 830) of dysfunction in children than the specific psychiatric disorder from which the parent suffers. They speculated that long-term or chronic parental dysfunction may have a particularly damaging effect on children, and they made a recommendation that is relevant to the study at hand. They argued for more cross-sectional studies that assess parents for a variety of disorders, including the chronicity and severity of the parental illness. This study meets that
requirement by investigating personality disorders, which are long-term or chronic by definition.

Ensuing research on children of depressed parents found results consistent with the data above. Parental depression was associated with high proportions of child disturbance and a wide spectrum of problems in children. In their review of 34 studies on the relationship between parental depression and child functioning, Forehand, McCombs, and Brody (1987) addressed the diversity of variables studied with regard to child functioning and focused their attention on whether four areas of child adjustment were differentially related to parental depression. The four aspects of child behavior examined were academic or cognitive, "prosocial", internalizing, and externalizing. They also included studies with three different kinds of samples, depressed parents (top-down), families of clinic children with behavior problems (bottom-up), and "nonproblem" parents and children (control group).

Forehand and his colleagues found that, when collapsing the four areas of child functioning and including all three populations, high levels of parental depression were associated with child impairment in 55% of the cases. When strength of association between parent and child symptomatology was compared by sample type, the authors found that a stronger correlation was evident in the top-down studies. This difference seemed to be accounted for by
the greater internalizing and externalizing problems shown by children of depressed parents. Significant differences were not found for the type of child dysfunction investigated. In other words, poor cognitive and social competence, behavioral problems, and symptoms reflecting internal distress in children were found to be equally related to depression in parents.

The primary weaknesses in the depression research conducted until approximately the middle 1980's were the relatively rare use of control groups and of uniform or easily replicated child diagnostic and adjustment criteria. In their integrative review previously cited, Downey and Coyne (1990) argued that considerable progress was made in the latter 1980's with respect to child assessment and nosology and in the methodology used for the study of children of depressed parents. Most of the studies reviewed in their article were from this later period of research.

Studies that used control groups and standardized diagnostic measures were chosen by the authors for review. Instruments used to assess parents were typically the Diagnostic and Statistical Manual of Mental Disorders, third edition (DSM III), the Research Diagnostic Criteria (RDC; Spitzer, Endicott, & Robins, 1975), and/or the Schedule of Affective Disorders and Schizophrenia (SADS; Endicott & Spitzer, 1978). There was more variability in the way that child functioning was measured, with studies often including
some combination of the DSM III, the Kiddie Schedule of Affective Disorders and Schizophrenia (K-SADS), the Child Behavior Checklist (CBCL, teacher or parent forms; Achenbach & Edelbrock, 1983) or the Connors Questionnaire for parents or teachers. In all, there were 24 studies based on 18 samples of both unipolar and bipolar probands (adult subjects with a diagnosis of depression) and their offspring, who ranged in age from 1 to 23 years old.

The results were fairly consistent across studies. School-aged children of depressed parents showed higher levels of both internalizing (emotional distress) and externalizing (problematic behavior) symptoms than children of the non-disordered control group. This finding was demonstrated whether the dependent variables or criteria for child dysfunction were by parent ratings (Billings & Moos, 1983; Breslau, Davis, & Prabucki, 1988; Lee & Gotlib, 1989a, 1989b; Richters & Pelligrini, 1989), teacher ratings (Lee & Gotlib, 1989a, 1989b; Richters & Pelligrini, 1989), or reported by the children themselves (Breslau et al., 1988; Hirsch, Moos, & Reischl, 1985). These studies also reflected that children of depressed parents exhibited greater social deficits (Hammen et al., 1987, Richters & Pelligrini, 1989) and academic underachievement (Billings & Moos, 1983; Hammen et al., 1987; Weissman, Gammon et al., 1987). Among studies that addressed somatic problems, it was found that children of depressed parents were in poorer
physical health (Billings & Moos, 1983; Weissman, Gammon et al., 1987).

Less data are available on the relationship between parental depression and adjustment of infants and toddlers, but those studies that did include young children reported that they exhibited both depressive and anti-social behaviors (Gaensbauer, Harmon, Cytryn, & McKnew, 1984; Zahn-Waxler, Cummings, McKnew, & Radke-Yarrow, 1984; Zahn-Waxler et al., 1988). The latter article established that symptoms which were observed in children at age two continued to be evident at age six. Downey and Coyne (1990) concluded that "the study shows that it is possible to identify depressive tendencies in the offspring of affectively disturbed parents early in life, and that these problems continue" (p. 56).

Nine studies in this review included DSM III diagnosis as a dependent variable for children in their samples. In each of these studies, a significantly greater number of children of depressed parents received a psychiatric diagnosis as compared to children in the control group. However, as noted in the earlier review by Beardslee and his colleagues (1983), affective disorders almost exclusively accounted for the difference between children of depressed parents and control children. In other words, children of depressed parents had a higher than average incidence of depressive diagnoses (major depression, depressive disorder not otherwise specified, etc.) but did not differ
significantly from control group children on frequency of other disorders, such as hyperactivity.

Another aspect of parental depression that has been addressed in the literature is the distinction between bipolar and unipolar depression and its impact on children. Investigators have discovered that children of parents with unipolar depression were somewhat more disturbed in general and less socially competent than children of bipolar parents (Conners, Himmelhoch, Goyette, Ulrich, & Neil, 1979; Hammen et al., 1987). Studies have also shown mothers with unipolar depression to be more negative in interactions with their children (Gordon et al., 1989). However, attachment studies using a modified version of Ainsworth's Strange Situation (Ainsworth & Wittig, 1969) have found that insecure attachment is more common in children of bipolar mothers (Radke-Yarrow, Cummings, Kuczynski, & Chapman, 1985).

Downey and Coyne have explained the common finding that children of unipolar disordered parents are more impaired than children of bipolar disordered parents by proposing that it is accounted for by chronicity of illness. They argued that a higher proportion of unipolar disordered patients may have a severe course of illness with frequent recurrences as compared to the bipolar patients. They pointed out that "available evidence suggests that child adjustment does not fluctuate as parents move in and out of episodes" (Billings & Moos, 1985; Richters & Pelligrini,
1989). The authors posited that factors associated with depression, such as family stress and chronic parental impairment, may be more crucial to child maladjustment than the depressive episodes themselves.

This concern about length or recurrence of illness has been echoed by many researchers who state that "chronicity rather than diagnostic specificity" (Merikangas et al., 1988) is a key variable that accounts for more-frequent or severe psychopathology in children of psychiatric patients. This notion has important meaning for the study of child correlates of parental psychopathology. It implies that any mental health disorder that chronically affects the parent may be most detrimental to the child's functioning. Given this premise, parental character disorders are an obvious risk to child development and may be hypothesized to more severely impede proper adjustment in children.

Moreover, in their discussion of the underlying relationship between depression and child dysfunction, Downey and Coyne state that personality disorders may be an indirect link. They speculated that, for instance, the poor parenting behaviors that are often observed in depressed mothers (Bettes, 1988; Cohn, Matias, Tronick, Connell, & Lyons-Ruth, 1986; Davenport, Zahn-Waxler, Adland, & Mayfield, 1984; Gordon et al., 1989; Hops et al., 1987; Kochanska, Kuczynski, Radke-Yarrow, & Welsh, 1987) may be attributable to a concomitant character disorder.
The issue of parental character disorders was also raised by Downey and Coyne in their discussion of methodological concerns about the literature on children of depressed parents. They state that depression is "a heterogenous episodic phenomenon". This phrase refers to the fact that there are several types of affective disorders with varying characteristics and courses of illness. For instance, it has been estimated that 40% of patients who are being treated for major depression also suffer from chronic dysthymia, resulting in a "double depression" (Keller & Shapiro, 1982). Among other factors with which the authors were concerned was that "anxiety disorders and personality disturbance often co-occur with major depression" (Black, Bell, Hulbert, & Nasrallah, 1988; Merikangas et al., 1988). Downey and Coyne stated that personality disorders are a particularly important aspect of the variability of depression and its course of illness and should be examined as a separate entity in future research.

Several studies have pursued the question of what is the correlation between depression, an Axis I disorder, and personality or Axis II disorders. One study found that 35% of patients hospitalized for major depression also had a character disorder (Shea, Glass, Pilkonis, Watkins, & Docherty, 1987). The instrument used to measure character disturbance was the Personality Assessment Form, developed by the NIMH Treatment of Depression Collaborative Research
The data indicated that those depressed patients who also had a personality disorder had more frequent and chronic depressive episodes, were more likely to have an endogenous rather than reactive depression, and reported generally higher levels of subjective distress on many symptom dimensions.

Pfohl, Stangl, and Zimmerman (1984) also examined the implications of a dual diagnosis of major depression and personality disorder. They found that these patients had an earlier age of onset for psychiatric disturbance, greater severity of self-reported symptoms, poorer social support, higher incidence of marital separation and divorce, more life stressors, more frequent suicide attempts, and poorer response to medication. Black and his colleagues (1988) similarly found that patients with both a major depressive and a personality disorder had an earlier age of depression onset, more suicidal thoughts and attempts, more hospitalizations, and a longer duration of the depressive episode. Finally, as seems logical, many studies have documented that depressed patients who are also personality disordered have a significantly poorer prognosis (Charney, Nelson, & Quinlan, 1981; Tyrer, Casey, & Gall, 1983; Zimmerman, Coryell, Pfohl, Corenthal, & Stangl, 1986).

Given the above information about character pathology, it is not surprising that Rutter and Quinton (1984)
conjectured that parental personality disorders might have a stronger impact on child functioning than parental depression. It is, however, surprising that an empirical comparison between the two has not been conducted, other than in studies which touch upon the differences indirectly, such as placing character disordered parents with a variety of patients in an "other psychiatric disorders" category. (These studies will be considered in the section below on personality disorders.) In fact, Downey and Coyne (1990) call for studies on Axis II diagnoses in their recommendations for future research. They remarked that character disorders may be significant not only for their impact when associated with depression but as a "direct source of parenting problems and increased risk for child disturbance" (p. 69).

Anxiety Disorders

Top-down research on the cross-generational comorbidity of anxiety disorders has examined several diagnostic sub-sets of these disturbances. Panic disorder, agoraphobia, specific phobias, and generalized anxiety disorder in parents have been investigated. Children are assessed for concordant diagnoses such as separation anxiety, school phobia, and overanxious disorder. In general, these concordance studies have yielded inconsistent findings, probably due to a large degree to methodological
problems.

Berg (1976) found evidence of increased rates of school phobia among children of mothers with agoraphobia, a disorder characterized by an overwhelming anxiety or fear of public places. The diagnostic procedure used in this study was problematic in that investigators assessed school phobia using a questionnaire that did not address or rule out other reasons why children might be absent, such as parental difficulties in taking the child to school. Therefore, estimates of school phobia in the sample appear inflated.

A similar study that compared children of agoraphobic parents to a matched, normal control group found no difference between the groups (Buglass, Clarke, Henderson, Kreitman, & Presley, 1977). School phobia as well as general indices of emotional disturbance were examined, with no increased symptoms observed for the children of agoraphobics. The weakness of this study is that it had a small sample with a low number of preadolescents and teenagers, the age group most likely to suffer from school phobia (Berg, 1976; Last, Francis, Hersen, Kazdin, & Strauss, 1987).

Turner and his colleagues (1987) examined parents with a variety of anxiety disorders and found results divergent from those above. Their data showed that children of anxiety disordered parents were significantly more symptomatic than the two normal control groups to whom they
were compared. Anxiety disorders were present in 46% of the children of parents with an Axis I anxiety disturbance. However, 27% of the children of dysthymia patients in the sample also had anxiety disorders, so children of the two patient groups did not differ significantly overall.

Child correlates of maternal anxiety concurrent with depression have also been investigated in the literature. One study, (Weissman, Leckman, Merikangas, Gammon, & Prusoff, 1984), collected a sample of three groups for comparison: women with major depression and no history of anxiety disorder, women with major depression and a concurrent anxiety disturbance, and matched control subjects. Subjects with depression and concurrent anxiety were further divided into three diagnostic groups, comprised of patients with depression and agoraphobia, depression and panic disorder, and depression and generalized anxiety disorder. Children of subjects from each of the three latter groups were compared to children of 'depression only' mothers and matched controls, exploring whether differences in the rate of separation anxiety or other anxiety disorders would be observed.

The authors found that separation anxiety was significantly prominent in children of women with depression plus panic disorder, with 36.8% of the children meeting the criteria for that diagnosis. When the panic disorder and agoraphobia groups were combined, the percentage of children
with separation anxiety decreased to 24.3%, still a high proportion. None of the other clinical groups reached rates of significance (Weissman et al., 1984).

This study had a notable methodological weakness that calls into question the interpretation of its findings. Child diagnostic criteria were gleaned from interviews with parents and relatives only, and no interview with the child or well standardized instrument, such as the CBCL, was included. It is then likely that the rate of child psychopathology was appreciably inaccurate for this sample, particularly in light of problems with relying on perceptions by depressed parents, as previously noted; (possible confounds to using reports by psychologically disordered parents are further discussed in Chapter V).

In a later study, the authors improved upon their methodology, including a self-report instrument for the children (Merikangas et al., 1988). They again studied parent-child concordance for anxiety versus depressive disorders, including a normal control group. The results revealed a "stronger transmissibility" for depression with concurrent anxiety than for major depression alone. Pure anxiety disorders in mothers were also associated with higher rates of anxiety in children, although the correlation was not significant for fathers and children.

Unlike the conclusions drawn by many researchers of concordance for schizophrenia and depression, Merikangas and
her colleagues interpreted their findings as indicating that specific parental diagnosis is a key to the degree of risk to the child. Whereas experts on other disorders have attributed increased rates of psychological impairment in children to secondary factors, such as marital or family discord, these authors argued that the specific combination of depression and anxiety seems to be particularly "transmissable from one generation to the next". They do qualify that this finding is somewhat gender specific, in that the correlations were found to be weaker for fathers than for mothers. Thus, the authors recommend that the diagnosis of both parents be considered in future research.

Taken as a whole, the literature suggests that children of parents with anxiety disorders, particularly when the mother is afflicted, are at increased risk for the development of some kind of anxiety disturbance. Klein and Last (1989) stated that top-down and bottom-up research not only indicates that anxiety disorders "tend to run in families" but that genetic research (i.e., twin and adoption studies) points to a strong biological component (Torgersen, 1988). Klein and Last concluded that stressful life events, family interaction patterns, and child-rearing practices, especially within the mother-child relationship, probably interact with an inherited disposition in the etiology of anxiety disorders in children. They speculated that certain forms of maternal psychopathology might be particularly
important in causing or maintaining children's anxiety disorders. For instance, they found that children with anxiety disorders are often found to have "mothers described as overprotective, having separation anxiety issues of their own, and reinforcing dependency and lack of autonomy in their children" (1989, p. 97). This description may be seen as fitting parents with an Axis I anxiety disturbance and those with an Axis II dependent personality disorder. The argument can, therefore, be made for investigating the role that parental character disorders might play in childhood anxiety disorders.

Alcoholism

Drug dependency literature will not be covered in this review because, rather than speaking to emotional or psycho-diagnostic correlates in children, studies in that area have focused primarily on organic and early developmental effects of maternal addiction during pregnancy; (e.g., for a substantive review of the literature on infant outcome of cocaine abuse, see Nuspiel & Hamel, 1991). Some studies have noted, however, that young children of narcotic addicted parents demonstrate excessive motor behavior akin to hyperactive symptoms (Ting, Keller, Berman, & Finnegan, 1974; Wilson, Desmond, & Wait, 1981), and poor school adjustment (Fanshel, 1975). Higher rates of child abuse, neglect, and foster care placement occur among families of
drug abusing women (Regan, Leifer, & Finnegan, 1984). While researchers such as Nace, Davis, and Gaspari (1991) have shown that psychiatric disorders, particularly Axis II disturbances, are common among substance abusers (see below), these psychological issues and their correlates in children have rarely been addressed in the drug dependence literature; however, this is a relatively new area of study.

Research on alcoholism is given more attention here because these studies have examined more directly the relationship between parental alcoholism, affective disorders, and personality disorders, and the association of these concomitant disturbances with emotional adaptation in children. In addition, correlates and consequences of alcohol abuse, including psychological risk to children, have been a subject of wide-spread concern for several decades, due to its pervasiveness in society.

In the United States, the prevalence of alcoholism in adults is estimated to be 10 million (Woodside, 1982), with the number of children under the age of 20 who are living with an alcoholic parent estimated to be from 7 million (Woodside, 1983) to 28 million (West & Prinz, 1987). Thus, to the extent that parental alcoholism places a child at risk for psychological disorder, a large segment of the child population of this country is affected.

A number of literature reviews have been written on child dysfunction correlates of parental alcoholism. This
outline of the research will be brief and will concentrate primarily on the more recent empirical studies which have been reviewed by West and Prinz (1987). The literature will be organized around the specific child diagnoses that have been investigated.

A few studies published in the early 1970's reported a link between hyperactivity in children and parental alcoholism (Cantwell, 1975). More recent research, however, has had mixed results. Interestingly, top-down data have tended to confirm the association (Aronson, Kyllerman, Sabel, Sandin, & Olegard, 1985; Bell & Cohen, 1981; Steinhausen, Nestler, & Huth, 1982), while significant correlations have not emerged in bottom-up research (Morrison, 1980; Stewart, 1980). West and Prinz speculated that the correlation between alcoholism and hyperactivity is affected by the presence of a third variable which is common to hyperactive children -- aggressive behavior. They stated that the "weak but detectable association between parental alcoholism and childhood hyperactivity actually may be due to an association with conduct problems" (p. 207, 1987), meaning that parental alcoholism could be more directly related to child conduct or aggressivity disturbances than to hyperactivity in children.

Parental alcoholism has also shown correlations with a number of adolescent psychosocial problems. Studies have found a higher incidence of adolescent alcohol abuse
Finally, there is much research to support the notion that parental alcoholism is associated with mood and anxiety disorders in children and adolescents (Anderson & Quast, 1983; Moos & Billings, 1982; Steinhausen, Gobel, & Nestler, 1984), including a tendency to suffer from lowered self-esteem (Hughes, 1977) and a poor sense of control or power over their environment (Kern et al., 1981). The link between increased depression and anxiety in children and alcohol abuse in parents is predictable for several reasons.

It is logical to expect that the inevitable interpersonal consequences of alcoholism, within and outside of the immediate family system, would lead to higher rates of emotional disorders in children. In addition, parental alcohol abuse often co-occurs with underlying, (sometimes undiagnosed), depressive and anxiety disorders (Waldinger, 1984). For instance, patients with an affective disorder, concurrent with an alcohol or drug abuse problem, are seen as attempting to "self-medicate" their mood disturbance (Waldinger, 1984). Given the research previously reviewed that demonstrated a cross generational co-occurrence of depressive and anxiety disorders, children may show increased rates of these disturbances as a function of the
alcohol or affective disorders alone or, most likely, in combination.

West and Prinz concluded that parental alcoholism is related significantly to higher incidence of child symptomatology. They were tentative with regard to the strength of its relationship to specific childhood diagnoses, pointing out that many of the studies were weak in their ability to reliably identify actual syndromes. For the purposes of this review, it is important to note that alcoholism, which is a relatively frequent disturbance among personality disordered individuals (Nace et al., 1991; see below), may be seen as another detriment of significant risk for children. As it is difficult to separate the effects of alcoholism, family discord, and underlying character disturbance, the strength of each of these factors is not yet known.

**Personality Disorders**

To date, there are no top-down studies that focus primarily on character disordered parents and their children. (Bottom-up studies of this particular area are also lacking. The dearth of both types of research is a rationale for conducting this investigation.) A few top-down studies on the correlation between parental and child psychopathology have, however, examined a broad population of adults that included personality disorder patients.
Rutter and Quinton (1984) conducted a four year prospective study of psychiatric patients with children at home under 15 years of age, comparing them to a control group of families in the general population. The sample included patients with both inpatient and outpatient treatment histories. They suffered from disorders ranging from anxiety to psychosis, some also with alcohol abuse problems. 56% of the males and 24% of the females were assessed as having a personality disorder, either as a primary or concurrent diagnosis.

The authors found that there was a very high level of family discord throughout the sample, but there were several significant differences between families of the personality disorder group and those of other diagnoses. There were much higher rates of marital discord and affective disorders in spouses for character disordered patients, and their children were more commonly exposed to moderate or marked hostile behavior from the patient parent or between the parents. Personality disordered patients also exhibited much greater "marked persistence" of their disorder, meaning that more than two thirds of the time they were experiencing significant impairment in their general ability to function. Consequently, character disorder patients were seen as having a poorer prognosis.

This finding of "marked persistence" harkens back to previously discussed conclusions of several researchers on
parental schizophrenia and depression (e.g., Beardslee et al., 1983; Merikangas et al., 1988). These researchers argued that psychological risk to children is greatest for parental disorders that are the most chronic and persistent. The data from this Rutter and Quinton study seem to confirm that parental personality disorders are, overall, more persistent and debilitating than other psychiatric disturbances.

Other data from the Rutter and Quinton study demonstrated that, compared to the control group, children of psychiatric patients displayed an increased rate of persistent emotional or behavioral disturbance, with conduct disorder being a frequent diagnosis. Most of the child variables investigated did not show significant differences across parental diagnosis. Children of parents with a personality disorder did not exhibit a discernably greater incidence or severity of dysfunction; although, a trend in the data indicated that conduct disorder in children may be more prevalent among parents with a character disorder. Marital discord and disruption was revealed to be a powerful predictor of disturbance in children, with boys tending to be more affected than girls.

Despite the lack of clear findings for differences by parental diagnosis, the authors concluded that "psychiatric risk was greatest in the case of personality disorders", especially when the particular character type has a
propensity for hostile behavior. This conclusion was drawn in part because of the severe psychosocial problems associated with personality disorders (e.g., marital discord). In the end, the authors conjectured that family discord and hostility may be the primary mediating variables in the relationship between parental psychiatric disorder and psychological disturbance in children.

The findings of this study suggest that, while specificity of parental diagnosis may not be the most crucial factor for child outcome, having a parent with an Axis II disorder exponentially increases the risk for dysfunction. The concomitant family stressors that accompany character disorders are obviously many, lending support to the notion that children of Axis II patients might be more impaired as a result. The fact that, in this particular study, significantly greater severity of disturbance was not found for children of Axis II patients versus Axis I patients may be due either to methodological problems or to child resiliency factors (Anthony & Cohler, 1987; Holahan & Moos, 1987).

Although not inclusive of offspring co-morbidity data, prevalence research on personality disorders provides information relevant to this study by creating a context for understanding the pervasiveness of these disturbances. Many psychiatric epidemiological studies have not attempted to cover Axis II disorders, reportedly because of the
difficulty of diagnostic precision, particularly
differentiation among personality types (Freedman, 1984;
Tyrer, Casey, & Ferguson, 1991). Even research sponsored by
the National Institute of Mental Health's "Epidemiologic
Catchment Area" program investigated only anti-social
personality disorder, finding it to occur in 0.6 to 1.3% of
the population in a six month period (Myers et al., 1984)
and in 2.1 to 3.3% of people over the course of a lifetime
(Robins et al., 1984).

Currently, improvements in the standard classification
approach to personality disorders, with the DSM III and DSM
III-R using clearer, more reliable diagnostic criteria, have
spawned more research on the prevalence of Axis II
disturbances (Tyrer et al., 1991). The review by Tyrer
found that previously reported prevalence figures ranged
widely from 2 to 34%, depending on the method and
population. A more recent, and probably more realistic
estimate of proportion of character disorders in the general
population is 11.1% (Reich, Yates, & Nduaguba, 1989).

Borderline personality disorder, being of considerable
theoretical and clinical interest to many, has been studied
more frequently. Epidemiological data on this disorder has
indicated that the prevalence is between .2 and 1.8% in the
general population, and is approximately 15% among

Widiger and Rogers reviewed the literature on
prevalence of personality disorders in clinic settings (1989). They found schizoid and obsessive compulsive personality disorders to be the rarest, while borderline, histrionic, and schizotypal were the most common, particularly in inpatient settings. They noted, however, that their findings were skewed in the sense that their data sources pulled for more severe Axis II pathology, as the samples were often drawn from psychiatric inpatient units. Thus, they felt that outpatient and non-psychiatric medical facilities would undoubtedly find more dependent and passive-aggressive personality disorders, which are generally thought of as less severe yet enduring disturbances.

The authors also examined the frequency with which more than one personality disorder is diagnosed, as well as the frequency of co-occurrence of Axis I and II disorders. They found that borderline disorders had the highest rate of co-occurrence with another personality disorder, leading them to speculate that some clinicians use the diagnosis as an "indicator of dysfunction severity, rather than as a distinct personality disorder" (p. 134). As will be elaborated below, it was noted that character pathology is frequently associated with depression and anxiety, as well as eating disorders such as bulimia. The authors in fact argued that personality disorders predispose the individual to depression.
Other researchers have found a frequent co-occurrence of Axis I and II disorders (Black et al., 1988; Merikangas et al., 1988; Pfohl et al., 1984; Shea et al., 1987). The incidence of personality disorder in patients hospitalized for depression has been shown to occur at remarkably high rates. Shea and her colleagues (1987) found that 35% of the sample tested had at least one diagnosable character disorder, and an additional 40% had a "probable personality disorder". Data from another study showed that 52% of the hospitalized patients met the criteria for at least one DSM-III, Axis II disorder, with 54% of the personality disordered group meeting the criteria for more than one character disorder (Pfohl et al., 1984).

In examining the frequency of different personality types, many studies have divided the disorders into the three clusters appearing in the DSM III, as described in the theoretical review above. Widiger and Rogers (1989) pointed out that at one time it was believed that the "odd or eccentric", "dramatic or erratic", and "anxious or fearful" clusters would be associated with psychotic, affective, and anxiety disorders, respectively. They reported that these correlations do occur to some extent, (e.g., for paranoid, borderline, avoidant and dependent disorders), but with some notable exceptions, such as the fact that passive-aggressive patients do not tend to have anxiety disorders.

Shea's study found that the anxious cluster of
personality disorders appears most frequently with major depression, although borderline and histrionic disorders are also common among depressed patients (Pfohl et al., 1984; Shea et al., 1987). In the Shea and Pfohl studies, personality disordered patients did not differ from individuals without character pathology on demographic variables such as age and gender. Differences were detected for marital status. Shea and her colleagues found that individuals in the odd and dramatic personality clusters were less likely to be married and more likely to be single or divorced, while Pfohl and his associates found higher rates of separation and divorce among patients with personality disorders in general.

Another aspect of character pathology that has received attention in the literature is its relationship to substance abuse. For instance, one study drew subjects from an inpatient drug and alcohol abuse program and assessed the prevalence and covariants of personality disorders in that population (Nace et al., 1991). The data showed that character disorders are not only prevalent but associated with a myriad of more severe problems, as compared to their non-personality disordered counterparts. The authors found that 57% of their sample had at least one personality disorder, with borderline being by far the most frequent diagnosis. The other cluster B (dramatic/erratic) disorders were also highly represented. Character disordered patients
used the addictive substances more extensively than non-disordered patients. They reported significantly more compulsive use of alcohol and more of a tendency to use alcohol to manage their moods. Subjects with a dual diagnosis of chemical dependency and Axis II disorder showed a greater lifetime usage of all drugs surveyed than did other patients in the program. Personality disordered patients indicated that they were significantly less satisfied with their emotional health, relationships, school and job performance, and overall quality of their lives. Research measures also showed them to be more impulsive, depressed, and socially isolated than the other inpatients.

Some attention has also been directed at a related topic, the issue of character pathology in adult children of alcoholics (ACOA's). Hibbard (1989) compared ACOA's and matched controls on measures of personality pathology and object relational development. Using the MCMI as his measure of pathology, he found the predicted higher levels of personality disorder (basic and severe) in ACOA's. Significantly greater object relations pathology, assessed through Rorschach scores for egocentricity (Exner, 1986) and object concepts (Blatt, Brenneis, Schimek, & Glick, 1976), was also present.

In sum, at least 11% of the population at large suffers from a personality disorder. Axis II disorders are found to be more pervasive as one goes up the hierarchy of more
A repeated measure analysis of variance was used to analyze the knowledge scores for the experimental group and the control group at the three time points. As can be seen in Table 7 both groups of women appear to have approximately the same knowledge score at pretest measurement (Time 1) with the control group being slightly higher.

There is an extremely robust statistically significant difference (p= 0.01) between Time 1 and Time 2, suggesting that there was a positive impact from the intervention with significant information gained by the women who attended the classes.

At Time 3 there is again a statistically significant difference in knowledge scores (p= 0.01) between the two groups, suggesting that the experimental group retained some of the information gained from the classes.

In summary, at Time 1, the first null hypothesis, there will be no difference in knowledge about breast cancer between the experimental group and the control group fails to be rejected.

At Times 2 and 3, the first null hypothesis, there will be no difference in knowledge about breast cancer between the experimental and the control group is rejected, with the experimental group showing a statistically significant higher knowledge score.
marital problems, and maternal adjustment on depression and anxiety scales.

The data indicated that, not only did child compliance and maternal perceptions of the children differ as expected between the two populations, but that clinic mothers showed much more emotional disturbance than the control group. Most interesting about the results is that the maternal mood ratings, particularly depression, were among the strongest discriminators between the two groups. In other words, maternal affective disorder was markedly more frequent in mothers of children who were in treatment, while other variables, such as marital satisfaction did not differ between the two groups.

Another study, one that recruited subjects for a treatment program for children with behavior problems, found results converse to those reported by Griest and his colleagues. Child behavioral dysfunction was not related to parental depression or other aspects of parental psychopathology investigated, (e.g., alienation, social nonconformity), but it was associated with marital discord. There was, however, a significant relationship between negative parental behavior toward the child and degree of offspring disturbance. Also unusual in the findings was that parental perceptions of the child's behavior were not related to actual observed behavior in the child, as researcher ratings of positive and negative behaviors of the
child toward the parent did not match parents perceptions of their children.

The authors interpreted these results as, in part, reflecting the issue discussed by many family systems theorists that children are sometimes the scapegoat for marital discord (Boszormenyi-Nagy & Ulrich, 1981). They also acknowledged, however, that their method of recruiting subjects through media advertising drew a somewhat different population than found in clinics, perhaps contributing to the divergent results.

Just as in the top-down literature, a number of bottom-up studies demonstrate significant associations between child behavior problems and family interaction style (e.g., Christiaanse, Lavigne, & Lerner, 1989; Searight, Searight, & Scott, 1987). For instance, McFarlane (1987) explored family interaction patterns, finding that parental overprotection was associated with emotional and behavioral problems in children. However, when the factor of parental "irritable distress" was teased out of the analyses, an interaction was observed. Psychological disturbance in children was related only to the combination of "high involvement" and high degrees of irritable behavior in parents.

A study observing free play and mother-child play interaction was conducted with treatment referral and normal control groups (Campbell, Breaux, Ewing, & Szumowski, 1986).
The authors also assessed family stress level (unemployment, illness, separations, etc.) and maternal subjective distress. Child patients had been referred for problems such as defiance, aggressiveness, and short attention span. The data reflected that "negative and directive" maternal behavior was associated with greater aggression and hyperactivity in children, initially and at one and two year follow-ups. While lower social class and greater family stress were also associated with child dysfunction, quality of the mother-child relationship was more highly predictive of the child's psychological status at follow-up.

Data from these latter two studies imply that the affective tone of the parent-child dyad is more predictive of child psychopathology than family interaction style alone. This suggests that perhaps only parental personality disorders characterized by difficulty modulating emotion or a propensity for feelings of anger or rage (e.g., dramatic or erratic cluster disorders) would be related to higher levels of disturbance in offspring. For example, a dependent parent with an enmeshed parenting style might not be more likely to produce an emotionally impaired child, unless the parent was prone to hostile dependencies.

It is fair to generalize that all character disordered patients have problems regarding constructive coping with negative affects and that, due to a rigidity in defenses, are vulnerable to experiencing more episodes of distress.
It is not clear to what extent a higher overall rate of irritability would be observed in interactions with their children. This rate may vary by the specific type of personality disorder or may vary within diagnoses, according to finer intrapsychic distinctions.

**Diagnosis-Oriented Research**

Similar to top-down literature, child-to-parent research examines specific childhood disorders, as well as taking the broader perspective above. A frequent strategy used to highlight the connection between children's symptoms and their parents' functioning involves the comparison of children with different diagnoses, to determine whether distinct patterns of parental impairment or familial disturbance are manifested. The overview that follows will discuss pertinent trends in concordance research for the child diagnostic categories that have been explored most frequently, beginning with anxiety disorder.

Much of the research performed on anxiety disorders in children has examined the parents, not for current psychiatric disorder but for history of childhood anxiety disturbances. Several studies have shown that a childhood history of anxiety is relatively common among these parents (e.g., Gittelman-Klein, 1975; Last, Phillips, and Statfeld, 1987).

Last, Hersen, Kazdin, Francis, and Grubb (1987) studied
the lifetime rate of occurrence of psychiatric disturbance in mothers of children with anxiety disorders. They found that a very high percentage of these parents had a history of anxiety problems at some time in their life (83%). Also, 57% of the mothers had a current anxiety disturbance, compared to 20% of other clinic mothers.

Bernstein and Garfinkel (1988) matched a small sample of school phobic children with children suffering from other psychological disorders. They found that both anxiety and affective disorders were more prevalent in the parents of the school phobic children. Family functioning was evaluated with the Family Assessment Measure (Skinner, Steinhauer, & Santa-Barbara, 1983). The authors discovered that families of school phobic children demonstrated more problems in the areas of role performance, communication, affective expression, and control.

The relatively scant research on parental correlates of anxiety disorders in children is weak not only in its breadth but its depth. Many studies in this area have assessed parents only for anxiety, and sometimes for other Axis I disorders (e.g., Kovacs, Gatsonis, Paulauskas, & Richards, 1989). Attention to parental personality factors is absent, as is examination of family stress factors that may be related to the children's disorders. As described below, parental co-morbidity and parenting deficits have been studied more extensively with respect to conduct
disorders.

Observations of the correlation between anti-social behavior in children and parents (or other relatives) dates back to the turn of the century (Still, 1902). Empirical studies beginning in the 1950's demonstrated links between sociopathy in parents, particularly fathers, and anti-social behavior in children (Glueck, & Glueck, 1950; Morris, Escoll, & Wexler, 1956).

Stewart and Leone (1978) attempted to improve upon previous research by using more standardized diagnostic criteria in their assessments. They also performed more extensive assessments of the families, as they interviewed and gathered family history data from parents and from relatives (grandparents, aunts, uncles). Their results converged with previous findings, indicating that boys with unsocialized, aggressive forms of conduct disorder had more adult relatives, particularly fathers, with anti-social personality disorder than boys in the control group.

In a later study, Stewart, deBlois, and Cummings (1980) compared the parents of conduct disordered boys with parents of boys with hyperactivity. They found that both groups of children had parents with a high rate of psychopathology; specifically, alcoholism and anti-social personality were prominent. The finding that high rates of alcoholism were associated with conduct disorder as well as hyperactivity contradicted the notion based on earlier research (e.g.,
Cantwell, 1975) that alcoholism might have a specific link to hyperactivity. Stewart and his colleagues concluded that the parental psychiatric disorders displayed in earlier studies on hyperactivity were common to parents of clinic children in general, and not indicative of precursors to specific childhood disorders.

Another study comparing conduct disorder and hyperactive children was performed in response to this 1980 research. The authors criticized Stewart's methodology on the grounds of validity and reliability problems for the manner in which children were diagnosed (Lahey et al., 1988). Lahey and his associates found, again, that hyperactivity (or attention-deficit disorder) had no particular pattern of parental concordance. However, mothers of children with conduct disorder were more depressed and received more diagnoses of substance abuse, somatization, and anti-social personality disorders. Again, substance abuse and anti-social disorders were more prevalent with fathers of conduct disordered children.

The overall messages to be gleaned from these conduct and hyperactivity studies are as follows. First, in general, parents of children with psychological disorders have a higher rate of psychiatric disturbance than do parents of normal children. Second, most of the clinic parents are similar to each other in level and type of mental health problems exhibited. Third, an exception to
the apparent 'clinic-parent similarity' is that conduct disorder, arguably one of the more severe childhood disturbances, is associated with more extreme psychopathology in parents, namely anti-social and substance abuse disorders. It should be noted that these studies have not assessed parents for the broad spectrum of personality disorders but have typically used questionnaires or interviews that can identify Axis I or anti-social disorder only. In any case, when comparing parents within a child clinical population on certain mental health indices, one group, parents of children with conduct disorders, is more severely disturbed than the others.

Other studies on these diagnostic categories have shed further light on these discoveries. Attention-deficit (ADD), conduct, oppositional, and anxiety disorders in children were compared in an investigation by Reeves, Weery, Elkind, and Zametkin (1987). The different diagnostic groups again tended to resemble each other on an index of parental psychopathology, with anti-social and alcoholism diagnoses being most common. The only significant difference by individual child diagnosis was that anxiety disorders were more prevalent in parents of children with an anxiety diagnosis than in parents of children with the behavioral problems.

However, data from this study demonstrated that children with the particular dual diagnosis of ADD and
conduct disorder were distinguishable from other clinic children. Alcoholism and anti-social diagnoses were significantly more common in the fathers of these children. These results were replicated by Lahey and his colleagues (1988) and by Biederman, Munir, and Knee (1987) who found higher rates of anti-social disorder in parents and siblings of children with the dual diagnoses of both ADD with conduct disorder and ADD with oppositional defiant disorder, compared to other clinic families.

Researchers in this field have interpreted the above results as indicating that conduct disorder, whether alone or with a dual diagnosis, is an entity distinct from other child mental health problems. While etiology can not be established through this correlational research, Lahey has suggested that the parental associations found, (i.e., anti-social personality disturbance), may be pointing to causative factors than can be investigated through other methodologies.

Another research strategy, still correlational, for examining conduct disorder has been to identify family risk factors, such as parenting and marital distress, in addition to parental psychopathology. In one study, the authors investigated the links between child conduct problems, marital satisfaction, and maternal anti-social personality (Frick, Lahey, Hartdagen, & Hynd, 1989). These two parental factors demonstrated a significant association with conduct
disorder. A series of regression analyses were then performed to investigate further the relationship among the three variables. Results indicated that marital satisfaction and conduct disorder are not directly related and that the variance between the two is largely related to the third variable, maternal personality pathology. The authors concluded that it is more parsimonious to consider maternal character disorder, specifically anti-social, as a possible "direct path" to behavior disturbance in children.

Frick and associates (1992) also studied maternal supervision and consistency in discipline, in conjunction with parental psychiatric disturbance and child conduct disorder. They compared the families of conduct disorder (CD), oppositional defiant disorder (ODD), and other clinic children. As seen repeatedly in the literature, they found a higher percentage of the CD parents had anti-social personality disorder (35%) and substance abuse disorders (50%), significantly more than the other groups. They also found that CD and ODD parents exhibited greater deviance on the maternal parenting measures than the other clinic group.

Loeber and Stouthamer-Loeber (1986) conducted a meta-analysis of the research on family factor correlates of juvenile delinquency or conduct disorder. They analyzed both longitudinal and cross-sectional studies. The longitudinal data demonstrated that "socialization variables" were the most powerful predictors of conduct and
delinquency problems. These variables included parental supervision, parental rejection, and parent-child involvement. Cross-sectional or concurrent studies compared aggressive to non-aggressive children and delinquent to non-delinquent teens. These data showed weaker effects for socialization practices per se but strong effects for a history of parental or child rejection.

Parental mental and physical health were considered to be among the relatively weaker predictors of conduct or delinquency disorders; however, of the 11 analyses regarding parental mental health which were yielded from five studies, nine were significant. Among the parental disturbances found to be related to anti-social behavior were depression and general "instability".

Research on family risk factors implicates parenting impairment and familial involvement as key links to conduct disturbance in children. The issue with respect to this study is similar to the questions posed by Frick and his colleagues (1989). How exactly do these parenting deficits relate to psychological disorders from which the parents suffer? How much of the parenting deviance is accounted for by underlying parental psychopathology? Frick's 1989 study found that parental character disorder accounted for more variance in child psychopathology than did marital discord, and the authors concluded that it was more parsimonious to hypothesize that parental personality pathology would bear a
more direct relationship to child dysfunction. This hypothesis is the basis for the study that follows. It is conjectured that underlying parental character pathology, even within a child clinical population, may account for much of the variance in the observed level of disturbance in family and child functioning.

Bottom-up studies to date have typically failed to assess parents for character disorders. Only conduct disorder research has addressed the issue of parental Axis II diagnosis and, even then, has only looked for the presence of anti-social disorder, (i.e., testing for a 4-9 profile on the MMPI). One study examined maternal "personality characteristics" in relationship to disruptive behavior disorders in children and found evidence of histrionic character traits, as well as anti-social disturbance (Lahey, Russo, Walker, & Piacentini, 1989); however, for personality assessment, this study used the MMPI, an instrument that is limited in its ability to identify and discriminate between Axis II disorders.

Summary and Implications of the Literature

Before a synopsis of the research is made, it is helpful to recall the cautions against inferring causality which have been eloquently presented by Rutter (1981) and Loeber and Stouthamer-Loeber (1986). While it is certainly tempting to reduce the findings of these studies to the
notion that 'parental psychiatric disturbance causes child psychopathology', this conclusion cannot be drawn from the data. The literature outlined above does not attempt nor claim to establish a causal link between parental and child disorders.

There are several confounds to inferring causality from correlational data which are worth recalling. First, two factors can be related consistently when they are actually caused by or dependent upon a third or more than one other variable. Second, two factors consistently related do not establish that one reliably predicts the other. Ability to predict is one of the defining features of causality, and it was not tested in most of the studies above. Third, if one factor is a single and direct cause, then its outcome should appear in every case. If parental psychopathology was a unitary cause of child dysfunction, then all children of such parents would be similarly affected, rather than showing the kind of variation which obviously exists within families.

Given what we know about the complexity of social, economic, and familial influences on children, as well as the constitutional strengths and weaknesses with which a child is born, it is absurd to consider child adjustment to be anything but multi-determined. The literature reviewed above, however, clearly demonstrates that there is a profound strength of relationship between parental and child
psychopathology.

The theoretical literature reviewed above spoke to the issue of how or why parent and child psychological disorder would be correlated. For instance, the parent's emotional condition would tend to impair their ability to respond in the empathic mode needed for the child's optimal psychological development. In addition, the child born with a biological or temperamental propensity for emotional or behavioral difficulties provides a challenge that creates stress for the parent, increasing the likelihood that the parent's psychological resources would be taxed, and underlying pathology would emerge. The consensus from all theoretical approaches (social learning, family systems, self-psychological, etc.) is that the association between parent and child psychological disorder is a logical and almost inevitable one, although it may be ameliorated by protective factors in the family or aspects of resiliency in the child.

The literature reviewed also described the characteristics of Axis II disorders, their embeddedness and chronicity, their association with social impairment, and the manner in which they limit the individual's ability to cope effectively with everyday stressors. Given what we know of these disorders, it stands to reason that families comprised of one or more parent with a personality disorder would experience much greater interpersonal stress.
Top-down empirical research provides evidence that no single Axis I disorder is particularly associated with greater psychopathology in children. Instead, it seems that chronicity of parental dysfunction, affective tone of the relationship between parent and child, and family and marital discord are more pertinent factors in the risk to children. Research on personality disorders suggested that these problems, especially chronicity of disorder, and persistence and severity of family discord, are more pronounced in patients with Axis II disorders than in mental health patients of other types.

Bottom-up research confirmed the fact that, while family stress and parental deficiencies tend to be higher in clinic families than in non-clinic families in general, the most severely disturbed children are often found in families that are headed by adults with an Axis II disturbance, namely anti-social disorder. These parents were found, among other problems, to be considerably less consistent and appropriate in supervision and limit-setting for their children.

The theoretical and empirical literature, taken as a whole, leads to the notion that assessment of parental character disorders may be a more parsimonious way of identifying children and families who are either most at risk or, if child symptomatology has already occurred, most in need of intensive therapeutic intervention. This study
tests hypotheses about parental personality disorders and childhood symptomatology.

Hypotheses

With this basic premise established, the study below will address several research questions. The hypotheses are divided into three sections. The first section is called the "main study" because it encompasses the primary research questions that were generated by the previous review of the literature. The main study hypotheses are related to the prevalence of adult disorders expected to occur in this parent population. They also address expected differences in the level of child and family dysfunction, based on whether the Primary Parent (see Chapter IV) is not psychiatrically disturbed or has an Axis I or II disorder.

The second group of predictions constitutes the "adjunct study". These hypotheses were generated by a panel of experts in child and family research and treatment. They address the 'within group' differences expected for children and families headed by a personality disordered parent. In other words, different clusters of Axis II disorders, as previously discussed, will be compared for variation in child and family dysfunction.

Finally, the third section of research questions is called the "exploratory study". It addresses whether significant differences exist between single-parent and two-
parent families in this sample. These questions are posed because of the preponderance of single-parent families in this study, and the need for more information about this type of population.

**Main Study Predictions**

The primary hypotheses and measures used to test them are as follows:

1) A significantly higher percentage of the parents will suffer from personality, (Axis II), disorders than from Axis I disorders (e.g., depression and anxiety), as assessed by self-ratings on a multiaxial clinical syndrome scale.

2) Personality disorders will be present in the parents of these clinic children at a significantly higher rate than expected in the general population of adults, as tested by comparing the sample frequency with the base rate norm of 11.1% (Reich et al., 1989).

3) Child identified-patients (IPs) of personality disordered parents will have significantly greater behavioral problems than children of non-disordered and Axis I disordered parents, with parent ratings used for behavioral assessment.

4) IPs of personality disordered parents will have significantly greater behavioral problems than children of non-disordered and Axis I disordered parents, (teacher ratings of behavior).

5) IPs of personality disordered parents will have significantly more severe presenting problems than children of non-disordered and Axis I disordered parents, (clinician ratings of presenting problems).

6) Families with a personality disordered parent will be impaired in more areas of functioning than families of non-disordered and Axis I disordered parents, (parental ratings of family dysfunction).

7) Families with a personality disordered parent will have problems that are significantly more severe in the area of appropriate behavioral limits for the children.
as compared to families of non-disordered and Axis I disordered parents, (clinician ratings).

**Adjunct Study Predictions**

These hypotheses address the differences expected within the personality disordered group. They were generated independently by a panel of 10 clinicians, all doctorates in clinical psychology. Each member of this panel has expertise in theory, research, and treatment of children and families and were instructed to base their predictions on all of these aspects of their background.

Specifically, these experts were asked to consider the different groupings of personality disorders posed by both Millon and the DSM III-R (see description in the theory section of this chapter), and to predict in rank order the levels of dysfunction expected for children and families. Hypotheses about the degrees of internalizing (e.g., somatizing) and externalizing (e.g., aggressive) symptoms expected for each of the child groups were also generated by each respondent, (see Appendix A for a copy of the questionnaire sent to each panel member).

According to a consensus of the panel, the following predictions were made:

1) There will be a significant difference in the pathology level of children vis a vis Millon's two categories of personality disorder pathology; children of parents with the "markedly severe" personality disorders will be more severely disturbed than children of the "mildly severe" character disorders, (parent ratings of child behavior).
2a) There will be a significant difference in the pathology level of children vis a vis the DSM III-R clusters of odd (A), erratic (B), and anxious (C) personality disorders, with the rank order of child disturbance being, from most to least dysfunctional, respectively: children of parents with cluster A disorders, children of parents with cluster B disorders, children of parents with cluster C disorders, (parent ratings of child behavior).

2b) There will be a significant difference in the pathology level of families vis a vis the DSM III-R clusters A, B, and C, with the rank order of family disturbance being, from most to least dysfunctional, respectively: families of parents with cluster A disorders, families of parents with cluster B disorders, families of parents with cluster C disorders, (parent ratings of family functioning).

3) Children of cluster A (odd) parents will exhibit about equal degrees of internalizing and externalizing symptomatology, (parent ratings).

4) Children of cluster B (erratic) parents will exhibit primarily externalizing symptomatology, (parent ratings).

5) Children of cluster C (anxious) parents will exhibit primarily internalizing symptomatology, (parent ratings).

**Exploratory Study**

Single-parent and two-parent families are compared in an exploratory investigation that establishes whether or not certain basic differences exist between these family types. Although there were relatively few two-parent families within the sample, analyses of possible differences are undertaken for two reasons. First, previous research on "assortative mating" has shown that the mental health status of the second parent can be either enhance or diminish co-morbidity risk in the children (Merikangas et al., 1988;
Wynne, 1984). Second, these exploratory analyses will clarify the results of the main study. It is necessary to establish that significant differences found in child and family functioning are related to a parent's personality disorder rather than the family's status as a single-parent or two-parent family.

In this child patient population, it is of interest to see whether children from single-parent families appear significantly different than children from two-parent families on any of the child measures used in the analyses above. Exploratory analyses will also examine whether the degree of family dysfunction is significantly different for single-parent versus two-parent families on the parent and clinician ratings. Finally, the frequencies of parental diagnostic groups (percent having no disorder, an Axis I, or an Axis II disorder) will be compared for single parents versus married parents. Again, significant differences are not expected on any of these indices comparing single-parent and two-parent families. These tests are included to rule out family status as a variable that might account for variance in the sample.
CHAPTER III

METHOD

Subjects

Families who presented their children for treatment at Loyola University's child guidance clinic (The Doyle Center) were asked to participate. This clinic is the catchment area mental health agency for child and family services on the far north side of Chicago. The community it serves is comprised of low to middle income residents of wide racial and ethnic diversity. Each family had scheduled an intake evaluation for at least one child whom they identified as suffering from significant emotional, behavioral, or school problems. The children identified as needing mental health treatment are the index subjects for the study. Hereafter, each child index subject will be referred to as "identified patient" or IP. Research cases were obtained through the intake process at the clinic where the entire family or household were asked to attend the first appointment, as part of a comprehensive child and family assessment.

Exclusion Criteria

In order to qualify for the research sample, the child presented as the focus for evaluation had to be between the
ages of four and seventeen. Secondly, at least one parent (biological or adoptive) must have lived with and had continuous, life-time custody of the child. Both partners in the two-parent families were encouraged to attend the intake and treatment appointments. If in attendance, both spouses were administered all measures and included in the study. Step-parents participated in the study when married to a biological or adoptive parent, and when in attendance for the child's intake. Families comprised only of custodial grandparents, foster, or step-parents and an IP were not eligible for inclusion in the study.

A few families were excluded because the parent did not speak or read in English, or the parent's literacy level was below that required for the measures. In those cases, translation or recitation of all the instruments was considered too cumbersome and of questionable validity.

Another eligibility requirement was that all members of the family consent to participate in the research. The consent agreement stipulates that participation is voluntary and that refusal to consent or decision to discontinue participation in the research in no way compromises the services that they receive at the Doyle Center. (The research consent form is presented in Appendix B.) For instance, if one member of a family of four -- parent, IP, or sibling, (although sibling data is not a part of this particular study) -- chose not to participate, then the
clinical questionnaires obtained in the intake were not used for research purposes. Even with this conservative consent provision, the research refusal rate was quite low. Only six families declined to participate over the course of two years of data collection.

Finally, it was necessary that the family complete all the research forms used in this study, as incomplete cases could not be interpreted. All cases were complete for the child ratings, family ratings, and parent personality assessment data, except one research case that was missing a child behavior checklist. Another exception to this rule was that some cases were missing data from a second parent. These cases were included due to the relative paucity of two-parent families in the study. Moreover, teacher reports were not available for all subjects in the sample, so their ratings were included as a smaller, cross-validation study.

Composition of Sample

Out of 102 research cases at the clinic, 50 families met the eligibility criteria. Most families were excluded due to non-completion of research measures. This may establish bias in the sample, as one could conjecture that families who did complete the questionnaires were more organized or functional than those who did not. Another aspect of bias in the sample is that families who dropped out after the intake could not be included, because one of
the instruments was collected at the first treatment session following the initial assessment. Both written and verbal instructions for the instruments were available to family members, so that confounds related to comprehension might be avoided. Anecdotally, it was observed that few parents appeared to have difficulty reading or understanding the measures.

The 50 families in this sample were comprised of 41 single-parent and 9 two-parent families. This yielded 50 IPs and 57 parents, as two spouses in the two-parent families did not complete the research measures and could not be included in the analyses. Of the 41 single-parent households, 40 were headed by biological mothers and one was headed by a biological father. Of the nine two-parent households, four were intact families (biological mothers and fathers), three were made up of biological fathers plus step-mothers, and two were comprised of biological mothers plus step-fathers.

The ethnic group composition of the sample was 58% African American (n = 29), 30% European American (n = 15), 10% Hispanic (n = 5), and 2% Middle Eastern (n = 1). Average gross annual and median incomes were $15,759 and $12,000, respectively, with a yearly income range of $2880 to $39,000 for the families in this sample.
Materials

All participating parents completed the Child Behavior Checklist (Achenbach & Edelbrock, 1983), the Family Assessment Measure-General Scale (Skinner et al., 1983), and the Millon Clinical Multiaxial Inventory-II (Millon, 1987). Teachers of some of the IP subjects completed the Teacher Report Form of the CBCL (Achenbach & Edelbrock, 1986). Clinicians completed a form which was developed by the agency staff as part of their intake evaluation procedure. Two aspects of this instrument were used in this study: ratings of the IPs' problems and the family's problems.

The Millon Clinical Multiaxial Inventory-II, (MCMI-II)

This questionnaire was used as the independent measure of parental psychopathology. It is a standardized clinical instrument that has been specifically designed to identify personality disorders. It can also be used to screen for depression, anxiety, alcohol and drug dependence, bipolar disorder, and psychotic disorders. The MCMI-II is made up of 175 true/false items. These items load on the following underlying factors: 10 personality styles, 3 severe personality pathologies, 9 clinical syndromes, and 3 validity scales. The clinical and personality scales relate to particular Axis I and Axis II diagnoses, such that significantly high scores denote the presence of specific DSM III-R disorders. (For further explanation of diagnostic
procedure, see Chapter IV.) The correspondence of MCMI-II factors to DSM III-R diagnoses has been established by empirical research, (see Chapter V). A standardized or "base rate" score (BR) is generated for each factor such that a score of 35 corresponds to the median score obtained by "normals" and 60 to the median obtained by psychiatric patients. 75 is the critical level of clinical significance, and 85 or above signifies that the characteristic or syndrome is "most predominant" for the individual (Choca et al., 1992).

The Child Behavior Checklist, (CBCL)

This instrument is among the most commonly administered questionnaires regarding child functioning, preferred by both clinicians and researchers. Downey and Coyne (1990) recommended it as a particularly reliable diagnostic tool. There are two sections of the measure, which assess both social and behavioral functioning of the child. Parents are asked to rate the frequency with which the IP exhibits each of 113 behavioral problems. The Revised Behavioral Profile is scaled to reflect "narrow band" clinical factors (e.g., withdrawal, delinquent); "broad-band" clinical factors (i.e., Internalizing and Externalizing); and Total Behavioral Problems. IPs' scores are compared to norms derived from age- and sex-matched samples of non-clinical subjects, and standardized T scores are generated from the
items. Scores falling at or above the 98th percentile are defined as denoting significant behavioral dysfunction.

The Social Competence Scale asks parents to describe children's social activities, school performance and other activities. Three sub-scale scores are derived, as is a total Social Competence score. Scores falling below the 2%ile are defined as denoting significant deficiencies in social functioning.

**The Teacher Report Form, (TRF)**

This questionnaire is similar to the one above and developed by the same authors. It is specifically relevant to teachers' observations of children. A behavioral profile in the same format as above is generated from 113 items. Teachers are also asked to provide other information about the child, such as their most recent academic grades and their standardized aptitude and achievement test scores.

**Clinician Ratings of Children**

The second measure of child psychopathology was ratings made by the clinician who assessed the child at the time of the intake evaluation, also referred to by clinic therapists as the "intensive diagnostic". The ratings identify severity and types of presenting problems for the child, such as fearfulness or physical aggression. (See Appendix C.) The form requires each evaluating clinician to rate the
degree to which the IP demonstrates each of 23 presenting problems. There is a four level, forced-choice response scale, indicating that the problem is either not presented by the IP or is exhibited to a mild, moderate, or severe degree. Child ratings were made prior to the administration of the psychological test for parents, so the clinician was blind to the results of parental personality testing at the time of assessing the child.

The Family Assessment Measure, (FAM)

Parents' perceptions of the family were ascertained through the Family Assessment Measure. The FAM is an instrument which asks subjects to rate statements about their families, (e.g., "Family duties are shared", "My family tries to run my life", "We deal with our problems even when they're serious"). Subjects rate their agreement with each statement in a forced-choice format on a four point scale, ranging from "Strongly agree" to "Strongly disagree". The 50 test items comprise nine sub-scales. The content scales are named Task Accomplishment, Role Performance, Communication, Affective Expression, Control, Involvement, and Values and Norms. The two response style sub-scales are Social Desirability and Defensiveness. An Overall Functioning Score is calculated by deriving the mean of the seven content scales. A profile of family strengths and problems is generated on the basis of scale scores.
Clinician Ratings of the Family

The second measure of family functioning was ratings made by the primary clinician who evaluated the family at the time of intake. This measure screens for seven types of presenting problems in the family, such as divorce, child abuse/neglect, or inability of the parents to set appropriate limits on the children. (See Appendix C.) Similar to the format of the clinician ratings of the child, a four level, forced-choice response scale for each item. Again, clinicians made these ratings before receiving the results of the parents' personality testing.

Procedure

Data Collection

This study was part of a broader research program conducted at Loyola University's Charles I. Doyle Child Guidance Center. Copies of the Achenbach CBCL were mailed to each parent when the intake appointment was scheduled. During the intake evaluation, the CBCL was collected, and several other questionnaires were handed out, including the FAM. At that time, parents and children (age 8 or older) were asked for permission that the surveys be used for ongoing research, as well as for the clinical purposes for which they were administered. If consent was obtained, and treatment at the Doyle Center was recommended by the evaluation team conducting the intake, then arrangements
were made for a Teacher Report Form to be sent to the school of the IP, as well as for the administration of the MCMI-II to the parents.

Parents were asked to come to the agency one half hour prior to the first therapy appointment in order to complete the MCMI-II. (All parents at the Doyle Center participate in the child's treatment, particularly in the beginning stages, whether through individual sessions that emphasize child management strategies, family therapy meetings, or to provide feedback and review of the child's progress.)

The following written introduction was provided to each parent, explaining the purpose of the questionnaire:

"The parent is the most important person in the child's life. Because of your vital significance to your child, and because we understand that having a child with emotional, behavioral, or school problems can be very stressful to the parent, we feel it is important to get to know you better and how you might be feeling at this time. Therefore, we ask that you take the next half hour or so to fill out this questionnaire, in the interest of helping us to more fully assess your child's family environment. On this survey, you will find a wide range of questions, many of which may not apply to you. Even so, please make sure to answer each and every question on the survey. Do not leave any blank spaces."

Research assistants or other staff were available to answer questions or address concerns about the form. It was noted over the course of data collection that few if any problems arose with either comprehension or reaction to the questionnaire.

The subjects' anonymity was protected by removing all names and other identifying information, and assigning
numbers to the data. Only general demographic information remained attached to the research measures, such as age, gender, and race.

The MCMI-II questionnaires were scored by computer, via National Computer Systems, Inc. All other measures were scored by either therapists or research assistants, all of whom were trained in this regard. Scoring accuracy was always checked by a research assistant, and scores transcribed for data coding and entry were spot checked for errors.
CHAPTER IV
RESULTS

Analyses: Main Study

Data were analyzed in both a descriptive sense and for testing hypothesized relationships. Descriptively, frequency of the following parental conditions were obtained, as assessed by the MCMI-II:

1) No psychological disorder (ND)
2) Personality disorder only (PD or Axis II)
3) Axis I disorder only (I)
4) Mixed disorder with both Axis I and II diagnoses (I & II).

Although Millon considers a BR score of 75 to be the critical level for each personality factor and clinical syndrome, a conservative criterion of 85 or higher was required to place a parent in any of the diagnostic cells. This higher level was chosen because of the findings of some empirical studies that the MCMI over-rates pathology. That is, the MCMI assigns diagnoses, particularly personality disorders, more frequently than clinicians do (Piersma, 1987). (For an elaborated discussion of methodological concerns about the MCMI-II, see Chapter V.)

Frequencies for the different categories of parental diagnoses are presented in Figure 1. The MCMI-II scores for
all 57 parents were included in the frequency analysis. A total of 37 parents or 65% of the sample received some kind of psychiatric diagnosis. Twenty parents or 35% of the sample had no psychiatric disturbance at all, comprising Group 1. There were 22 parents (39% of the sample) who received an Axis II diagnosis only, falling into Group 2. Only three parents (5% of the sample), suffering from anxiety and/or dysthymia, had 'pure' Axis I disorders (Group 3). Twelve parents (21% of the sample) fell into Group 4, having a "Mixed" or dual diagnosis of PD plus an Axis I disturbance. Of that "Mixed" group, four parents had PDs with a "severe syndrome" (i.e., delusional or thought disorder) and eight were diagnosed with PDs plus a "clinical syndrome", such as drug dependence, dysthymia, anxiety or bipolar disorder.

Therefore, of the 37 parents who received any diagnosis, 34 parents had personality disorders (92% of the clinical sub-sample or 60% of the total sample), and 15 had Axis I disorders (40% of the clinical sub-sample or 26% of the total sample).

It should be noted that, in order to protect the independence of each research case, only one parent was used as the criterion for most of the analyses below. For each family in the study, a "Primary Parent" was chosen on the
Figure 1. Frequencies of Parental Disorders

Note. N = 57 parents in sample. Group 1 n = 20; Group 2 n = 22; Group 3 n = 3; Group 4 n = 12. Groups refer to DSM III-R diagnoses. "Mixed" Group is disordered on both Axis I and Axis II.
following basis. Single parents were deemed "primary", regardless of gender. In this sample, there were 40 single-parent mothers and one single-parent father.

For two-parent families consisting of a biological and step-parent, the biological parent was considered primary, also regardless of gender. There were five step-families in the study, with three biological fathers and two biological mothers used as the Primary Parent. For intact, two-parent families (both biological parents), mothers were chosen as the primary or criterion parent whose MCMI-II diagnosis formed the basis of comparison. There were four cases of this type in the sample. Spouses of the Primary Parent, (i.e., biological fathers in intact families and step-parents) were designated, "Secondary Parents", in the descriptions below.

Hypothesis 1

A binomial test was employed to address the first hypothesis of this study, which stated that a significantly higher percentage of the parents would suffer from personality disorders than from Axis I disorders. The proportions were obtained by comparing scores on the MCMI-II. Group 4 cases were excluded from the analysis, so that only 'pure' cases, or Groups 2 and 3, were compared. Binomial z's were computed for both the Primary Parents and for total parents in the sample.
As expected, there were significantly more Primary Parents who received only an Axis II diagnosis (18 parents) than those with a pure Axis I diagnosis (3 parents); (binomial $z = 3.28$, $p < .001$). The predicted result was also found when including Secondary Parents in the analysis. Axis II disorders were obtained by 22 people versus the three with Axis I disturbances; (binomial $z = 3.80$, $p < .001$).

**Hypothesis 2**

This prediction stated that there would be significantly more personality disordered parents in this child clinic population than in the community at large. Binomial tests compared the observed number of personality disordered cases in this sample with the expected rate of 11.1% (Reich et al., 1989). As this criterion statistic or base rate does not exclude dual diagnostic groups in the general population, Group 4 parents were included in the analysis.

There were 27 Primary Parents (54% of the Primary Parents in the sample) with Axis II diagnoses. This is a significantly higher proportion than found in the population at large, (binomial $z = 9.66$, $p < .001$). Including Secondary Parents in the calculation (34 parents or 60% of the total parent sample) yields further significant results, (binomial $z = 11.68$, $p < .001$).
Hypotheses 3-7

These research questions, (see end of Chapter II), address whether greater levels of child and family dysfunction occur for personality disordered parents versus non-disordered parents (Group 1) and parents with Axis I disturbances (Group 3). As explained above, only Primary Parents were included in these groupings and analyses.

For each analysis, Group 4 data were collapsed with Group 2. Since all subjects in the mixed disorder group had a personality disorder, it was appropriate to include them in the category for which the most associated dysfunction was expected. In other words, it was assumed that children and families for Group 4 would be at least as disturbed as those of Group 2.

Statistical testing of Hypotheses 3-7 each required 2 separate analyses. The first test of each hypothesis compared the dependent variable in question (child or family dysfunction) for PD parents (Groups 2 and 4) versus the non-disordered sub-sample (Group 1). The second test of each hypothesis compared PD parents (Groups 2 and 4) and the Axis I sub-sample (Group 3) for the given dependent variable. Student t tests, (one-tailed probabilities), were performed.

Hypothesis 3. This predicted differences across parental diagnostic groups in the degree of child behavior disturbance as rated by the Primary Parent. The variable used as the index of behavior dysfunction was the "Total
Behavioral Problems" T-score, taken from the CBCL. No significant results were found between children of PD parents and non-disordered parents. There were also no differences in parental perception of the severity of child psychopathology for PD parents versus Axis I disordered parents.

Hypothesis 4. This question compared levels of child behavior disturbance as rated by the teacher, expecting differences by parental diagnostic group. The dependent variable used for this analysis was the "Total Behavioral Score", (T-score), taken from the TRF. A smaller sub-set of cases was compared, as only six teacher reports were received for children whose parents were in Group 1 (ND), and 11 teacher reports were available for children of the PD group. Contrary to the predictions, children of PD parents did not appear significantly different than those of non-disordered parents, by teacher rating. The second t test, comparing teacher ratings of children of Axis I parents, could not be performed, due to the small number of cases in that cell; (n = 2 children with an Axis I Primary Parent for whom a TRF was obtained.)

Hypothesis 5. This predicted differences in severity of IP behavior problems as rated by the clinician. For each IP, a mean of presenting problem severity was generated and used as the dependent variable. No significant differences were found on t tests comparing clinician ratings of
children of PD parents versus children of non-disordered or Axis I disordered parents. The sum of presenting problems as assessed by clinician was also computed for each IP. Again, no significant differences were found.

**Hypothesis 6.** This question addressed degree of family impairment as rated by the Primary Parent. Family impairment was defined as the number of family dysfunction scales at or above the critical level (problem range) on the FAM. As predicted, personality disordered Primary Parents rated their families as significantly more dysfunctional than did non-disordered Primary Parents ($t = -2.09$, one-tailed $p < .05$). Families with a character disordered Primary Parent had an average of 3.33 family functioning scales at the problem level ($SD = 2.48$), while families of non-disordered Primary Parents had an average of 1.85 scales ($SD = 2.30$) at the critical level. On the other hand, there was no discernable difference between families of PD parents and families of Axis I parents (average of 3.00 scales, $SD = 3.61$).

**Hypothesis 7.** This analysis tested one particular aspect of family dysfunction as rated by the clinician, impairment of the parent's ability to set appropriate behavioral limits on the children. Item 29 from the clinician rating form was used for these analyses. Student $t$ tests revealed no differences between families with PD Primary Parents and those with non-disordered or Axis II
In summary, a total of three of the main study hypotheses were supported. First, there were significantly more parents suffering from Axis II disorders than from Axis I disorders. This was true for both Primary and Secondary Parents. For the parent sample as a whole, 92% of those with a psychological disorder were characterologically disturbed. While 34 parents had an Axis II condition, only 15 had an Axis I disorder. Excluding parents with a mixed or dual diagnosis, 22 had personality disorders versus three with Axis I conditions. Secondly, the frequency of personality disorders observed in this sample greatly exceeds that of the general population, as expected. Sixty percent of the sample were character disordered, as opposed to the 11.1% base rate in the United States. Finally, partial support for Hypothesis 6 was obtained. As predicted, Primary Parents with character disorders considered their families to be significantly more dysfunctional, or impaired in more areas of functioning, than did non-disordered Primary Parents. The second aspect of Hypothesis 6 was not supported; that is, there was no discernable difference between the self-perceived level of dysfunction in families with a personality disordered Primary Parent and families with an Axis I disordered Primary Parent.
Analyses: Adjunct Study

Child and family dysfunction across different types of parental personality disorders was addressed according to hypotheses generated by the panel of clinical experts (see end of Chapter II). Comparisons were made within the character disordered segment of the sample, again using only Primary Parents, and collapsing Groups 2 and 4 since all the subjects in these groups were personality disordered. There were then 27 parents included in these analyses.

Hypothesis 1

This research question addressed whether children of parents with "markedly severe" personality disorders would exhibit more psychopathology than children of parents with "mildly severe" character disorders. Parents were categorized as "markedly severe" if any of those three personality scales, (schizotypal, borderline, or paranoid) were elevated into the clinical range (scaled score of 85 or above).

Six parents met the criteria of markedly severe. Their children were compared to the children of the 21 mildly severe character disordered parents, using a student t test of child behavior disturbance as rated by the Primary Parent. The variable used as the index of behavior dysfunction was the "Total Behavioral Problems" T-score, taken from the CBCL. Contrary to the prediction, no
difference was found in the mean level of child behavior disturbance across these two groups.

Hypotheses 2-5

Personality disordered subjects were placed in one of the three DSM III-R clusters, as discussed in Chapter II. Whether the Primary Parent was placed in Cluster A, B, or C, depended on the specific profile and its clinical interpretation. These placements were determined individually, due to concerns about the validity of making fine categorizations based on computer scores only (DeWolfe, Larson, & Ryan, 1986). In the test manual, Millon also stresses the importance of using clinical judgment when interpreting the computer generated profiles (1987).

As it turned out, categorization of the MCMI-II profiles was straightforward for this sample. Of the 27 Primary Parents who scored in the personality disorder domain (one or more scaled scores of 85 or above on a character type), 11 cases had a single scale elevation. These subjects were placed in the cluster corresponding to that scale's diagnosis. The other 16 PD cases had more than one elevated scale, thus showing features of more than one character disorder. Of these, 14 cases were easily categorized, either because one scaled score was clearly more severe or pronounced, or because the top several elevated scales all fell within a single cluster (e.g., the
subject was elevated on narcissistic, histrionic, and antisocial scales, all of which are cluster B disorders). Therefore, 25 of 27 cases were essentially categorized on the basis of their highest scaled score.

The two remaining cases were exceptional because the highest scores did not fall into a single cluster. Both of these cases had elevations in the "severe personality pathology" category (i.e., borderline and paranoid) as well as in the mild to moderately severe PDs (as described in Chapter II). These cases were placed in the clusters corresponding to the borderline and paranoid diagnoses, although these scales were not the most highly elevated. Thus, the severe personality pathology scales were given greater weight in these cases where the character disorder features were particularly heterogeneous.

Under the guidelines above, the 27 Primary Parents who had received an Axis II diagnosis broke down into the following clusters. Four parents were placed in Cluster A, with paranoid, schizoid, or schizotypal as the main diagnosis. Six parents were placed in Cluster B, with antisocial, sadistic, borderline, histrionic, or narcissistic as the main diagnosis. The majority of the sample parents (17) fell into Cluster C, with avoidant, dependent, obsessive compulsive, passive aggressive, or self-defeating being the most pronounced diagnosis. Hypotheses 2a through 5 were then tested according to these cluster groupings.
Hypothesis 2a. To test for significant differences in the pathology level of children vis a vis the DSM III-R clusters of odd (A), erratic (B), and anxious (C) personality disorders, an ANOVA was performed on Primary Parent ratings of child behavior. The variable used as the index of behavior dysfunction was the "Total Behavioral Problems" T-score, taken from the CBCL. Mean scores on this variable were compared. Children of Cluster B parents had the highest average behavior problem rating (70.67, SD = 10.35), followed by children of Cluster C (mean = 69.22, SD = 10.22), with children of Cluster A parents showing the least disturbance (mean = 64.75, SD = 22.29). This result is contrary to the panel's expectation that the ranking of child pathology from most to least would be Cluster A, Cluster B, and Cluster C, respectively. In addition, an analysis of variance revealed that the differences between these means were not significant. Therefore, the level of child behavior disturbance was roughly equivalent across the three clusters of parental character disorder.

Hypothesis 2b. To examine whether significant differences existed in the pathology level of families vis a vis the DSM III-R Clusters A, B, and C, an ANOVA was performed using Primary Parent ratings of family functioning. Degree of family impairment was defined as the number of family dysfunction scales at or above the critical level (problem range) on the FAM. The average number of
problem areas for families of Cluster A Primary Parents was 3.75 (SD = 3.30), while the averages for families of Clusters B and C were 3.50 (SD = 2.17) and 3.18 (SD = 2.53) respectively. This ranking of family disturbance was predicted by the panel; however, results of the ANOVA showed that these means were not significantly different. Thus, the severity of family dysfunction was essentially equal across these Axis II Primary Parent groupings.

Hypothesis 3. This prediction stated that children of Cluster A (odd) parents would exhibit about equal degrees of internalizing and externalizing symptomatology. Primary Parent ratings on the CBCL were compared, taking the T-scores for Total Internalizing and Total Externalizing as the criteria. Relative equivalence on these indices was defined as follows.

The means and standard deviations for Internalizing and Externalizing scores on the CBCL were obtained for the sample as a whole. The observed ratings were close, as the mean internalizing score was 64.49 with SD = 11.29 and the mean externalizing score was 66.80 with SD = 12.04. For the purpose of testing Hypotheses 3 through 5, relative equivalence of internalizing and externalizing symptoms was defined as mean scores falling within less than one-half standard deviation, or 5.6 scaled points.

The hypothesis that children of Cluster A parents would exhibit fairly equal degrees of internalizing and
externalizing could not be tested, due to the small number of Cluster A cases in the sample \((n = 4)\). The four children in this group showed a range of symptoms, consistent with chance; that is, one child had equal degrees of internalizing and externalizing symptoms, two children were more externalizing, and one was more internalizing.

**Hypothesis 4.** This prediction stated that children of Cluster B (erratic) parents would exhibit predominantly externalizing symptomatology. The hypothesis, again, could not be tested by Chi-square analysis, due to the small number of Cluster B cases \((n = 6)\) in the sample. It should be noted, however, that 2/3 of the group did fall into the expected category. Four of the six children of Cluster B Primary Parents were rated as having more externalizing symptoms by their parents, while one child rated as about equal and one as more internalizing. A binomial test of this result suggested a trend toward significance (binomial \(z = 1.76, p = .08\)), although a larger sample is needed to draw conclusions regarding this research question.

**Hypothesis 5.** This prediction stated that children of Cluster C (anxious) parents would exhibit predominantly internalizing symptomatology. Primary Parent ratings on the CBCL were analyzed, again, as explained above. The data indicated that, of the 17 children with Cluster C Primary Parents, four had fairly equal symptoms, while eight were more externalizing and five were more internalizing. A Chi-
square comparison of these symptom outcomes shows that the frequencies are about equal to chance. Therefore, Hypothesis 5 was not supported.

In summary, none of the panel's predictions was supported by the data. Contrary to expectations, significant differences did not occur across the groups investigated. Two of the hypotheses could not be tested, due to the small number of cases falling into Clusters A and B. One trend was observed (p < .08), suggesting that children of Cluster B parents, adults with an "erratic" type of personality disorder, may tend to exhibit more externalized symptoms, such as aggressive behavior. On the whole, however, these data reflected that neither Millon's two-part grouping nor the DSM III-R three-part cluster grouping corresponded to meaningful differences in level of child and family pathology and types of child symptomatology.

Exploratory Analyses

Statistical tests were performed to ascertain whether significant differences existed between single-parent and two-parent families for any of dependent variables used in the main study. First, a student t test compared the degree of child behavior disturbance as rated by the Primary Parent, for single- versus two-parent families. The variable used as the index of behavior dysfunction was the
"Total Behavioral Problems" T-score, taken from the CBCL. No difference was found between children of single-parents and children of two-parents on this measure. Similarly, further t tests demonstrated that clinician and teacher ratings of emotional and behavioral problems were equivalent for children of single-parent and two-parent families.

Student t tests were also used to compare single- and two-parent families on indices of family dysfunction. The level of family impairment as rated by the Primary Parent, (again defined as the number of family dysfunction scales at or above the critical level on the FAM), did not differ across single-parent and two-parent families. In addition, clinician ratings of the family, specifically parental ability to set appropriate/consistent limits, were equivalent for single-parent and two-parent families.

Single versus married Primary Parents were also compared on diagnostic status via the Chi-square test. Frequencies of non-disordered and Axis II disordered conditions were examined. No differences were found, meaning that the prevalence of "normals" and personality disorders is equivalent for single versus married Primary Parents. A comparison in the rate of Axis I conditions was not feasible, due to the small number of cases.

In addition, analyses of sample differences by IP gender were completed, to ascertain whether sex of IP is a significant aspect of variance in the sample. The mean
scores of all dependent variables used in the main study were compared across IP gender by student \( t \) tests. No differences were found. In other words, teacher, parent, and clinician ratings of child disturbance did not vary, nor did parent and clinician ratings of family dysfunction differ by IP gender. A Chi-square test comparing parent diagnosis by IP gender also revealed no differences. Non-disordered, Axis I disordered, and character disordered parents were represented in equal proportion across IP genders.

In summary, as expected, there were no significant differences between single-parent and two-parent families for any of the dependent variables used in this study. Parental mental health status also did not differ by marital status. Similarly, rates of child disturbance, family dysfunction, and parental dysfunction were equivalent across IP gender.

**Post-Hoc Analyses**

Pearson correlations were obtained for all dependent variables in the main study, in order to ascertain the degree to which the different reports or perceptions of child and family psychopathology were related. Correlations between teacher, parent, and clinician ratings of child behavior are presented in Table 1. Measures included in the analysis were the TRF "Total Behavioral Score" \( T \)-scores,
Table 1
Child Behavior Correlations (Interrater)

<table>
<thead>
<tr>
<th></th>
<th>Clinician Rating (Sum)</th>
<th>Clinician Rating (Mean)</th>
<th>Parent Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher Rating</td>
<td>.46**</td>
<td>.47*</td>
<td>.37</td>
</tr>
<tr>
<td>Parent Rating</td>
<td>.46**</td>
<td>.46**</td>
<td></td>
</tr>
<tr>
<td>Clinician Rating (Mean)</td>
<td></td>
<td>.99**</td>
<td></td>
</tr>
</tbody>
</table>

* $p < .05$

**$p < .01$
(teacher ratings), the CBCL "Total Behavioral Problems" T-scores, (Primary Parent ratings), the average severity of IPs' presenting problems (clinician ratings -- mean), and the sum of the severity of IPs' presenting problems (clinician ratings -- sum).

Assessments of children were significantly related to one another for all but one pairing -- teacher and parent mean scores. The five significant, positive correlations, (four of which are $p < .01$ and one is $p < .05$), indicate that clinician ratings of the severity of the IPs' problems tended to increase as a teacher or parent rated a child as more disturbed in their behavior. On the other hand, parent and teacher perceptions of the degree of child behavior disturbance were not related to one another.

Pearson correlations were also used to compare family functioning dependent variables to each other (clinician vs. Primary Parent perceptions), as well as to all ratings of child behavior. These statistics provide information not only on parent and clinician agreement about the family but on the extent to which child and family dysfunction are, in general, related for this sample. The correlational analyses yielded interesting results, presented in Table 2.

While the main study demonstrated that parent ratings of family dysfunction were related to parental character disorder, parent ratings of the family were not significantly related to any other dependent variable.
Table 2

**Family Functioning Correlations (Interrater and with Child Behavior Ratings)**

<table>
<thead>
<tr>
<th></th>
<th>Family Functioning</th>
<th>Clinician Rating</th>
<th>Parent Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Child Behavior</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher Rating</td>
<td>.18</td>
<td>- .27</td>
<td></td>
</tr>
<tr>
<td>Parent Rating</td>
<td>.39**</td>
<td>.07</td>
<td></td>
</tr>
<tr>
<td>Clinician Rating</td>
<td>.49**</td>
<td>-.04</td>
<td></td>
</tr>
<tr>
<td>(Mean)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinician Rating</td>
<td>.48**</td>
<td>-.04</td>
<td></td>
</tr>
<tr>
<td>(Sum)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Family Functioning</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parent</td>
<td>.17</td>
<td>----</td>
<td></td>
</tr>
</tbody>
</table>

* p < .05

**p < .01
First, parental perceptions of family functioning were not related to clinician perceptions of the family. This, however, is not altogether surprising, given that the clinician index used was much more narrow in focus (degree of parental impairment in setting appropriate/consistent limits on the child). Second, parental perceptions of family dysfunction were also unrelated to all child behavior ratings (by teacher, parent, and clinician). In other words, severity of family dysfunction from the parent's point of view did not increase with greater child psychopathology (any rater).

On the other hand, clinician perceptions of family functioning (parental ability to set limits) were significantly related to three child behavior assessments: "Total Behavioral Score" by the parent, clinician ratings of the mean of IPs' presenting problems, and clinician ratings of the sum of IPs' presenting problems ($p$'s < .01). These positive correlations indicate that when clinicians perceived the parent as more impaired in their ability to set appropriate and consistent limits, both the parent and clinician perceived the child to be more disturbed in their behavior and adjustment. This finding speaks not only to the convergent validity of clinician and parent ratings (even when a majority of the parents have a psychological disorder) but it affirms a premise that is both clinically and intuitively assumed, that poor child management skills
in parents correlates with poor behavioral and emotional functioning in children.

Finally, a post-hoc investigation of the difference between Primary Parent and Secondary Parent (step-parent or biological father in an intact family) psychopathology was conducted. This examination was initiated because an interesting finding was observed anecdotally. There were nine Secondary Parents in the sample, seven of whom completed the MCMI-II. Of those seven parents, 100% obtained psychiatric diagnoses; four of them had PD only disturbances and the other three had mixed disorders with Axis I and II conditions.

There were too few Secondary Parents to perform a Chi-square test of differences in diagnostic frequency. Instead, a binomial test investigated the significance of the 100% positive diagnostic status for Secondary Parents, versus the 65% positive diagnostic status for Primary Parents in the sample. This test found that the proportional difference in the rates of psychiatric disorder and non-disorder was significant (binomial $z = 2.82, p < .01$). In other words, Secondary Parents were psychologically impaired at a significantly more frequent rate than Primary Parents in this population.

Total psychopathology and Axis II pathology scores were computed for each parent. The "Total Pathology" rating was created by adding the scores for all 22 of the clinical
scales in the MCMI-II. Similarly, the "Axis II Pathology" score was computed by adding together the scaled scores for the 13 personality factors contained in the MCMI-II. The rates of "Total Pathology" and "Axis II Pathology" were generated for both Primary Parents and Secondary Parents. The Secondary Parents group included three biological fathers and four step-parents, (three female and one male).

Student t tests then compared the means of Total Pathology and Axis II Pathology for Primary versus Secondary Parents. Secondary Parents demonstrated significantly more general psychological disturbance than did Primary Parents ($t = -2.97$, two-tailed $p < .05$). The difference in Axis II pathology did not reach significance but reflected a trend toward greater Axis II pathology in the Secondary Parent ($t = -2.25$, two-tailed $p = .059$). These results converge with that of the binomial $z$, indicating that psychiatric disturbance occurred more frequently and severely in Secondary Parents.

Further analyses addressed whether this relative frequency and severity of disturbance in Secondary Parents is meaningful in its relationship to child and family dysfunction in the sample. Pearson correlations compared the rates of Total Pathology and Axis II Pathology to the rates of child behavior and family functioning disturbance in the sample. Dependent variables from the main study were used. The resulting correlations are presented in Table 3.
Table 3

Correlations of Child Behavior Disturbance and Family Dysfunction with Parental Psychopathology

<table>
<thead>
<tr>
<th></th>
<th>Child Behavior Disturbance</th>
<th>Family Dysfunction</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Teacher</td>
<td>Parent</td>
</tr>
<tr>
<td><strong>Primary Parent</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Pathology</td>
<td>-.12</td>
<td>.22</td>
</tr>
<tr>
<td><strong>Axis II Pathology</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Pathology</td>
<td>.06</td>
<td>.12</td>
</tr>
<tr>
<td><strong>Secondary Parent</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Pathology</td>
<td>.54</td>
<td>.46</td>
</tr>
<tr>
<td><strong>Axis II Pathology</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Pathology</td>
<td>.46</td>
<td>.43</td>
</tr>
</tbody>
</table>

* p < .05

Note. df = 48 for Primary Parent correlations and df = 5 for Secondary Parent correlations. Total Pathology refers to the sum of MCMI-II scores for all clinical and personality scales. Axis II Pathology refers to the sum of MCMI-II scores for personality scales only.
The majority of the observed correlations are positive, as one would expect, meaning that higher levels of parental pathology tended to be associated with greater child and family disturbance. Most of the correlations are fairly low, however, and not significant. Secondary Parent correlations appear stronger but did not reach significance, while lower numeric correlations for Primary Parents were significant in two cases. This dichotomy is due to the fact that there were few Secondary Parent cases, so that a higher correlational value is needed to reach significance.

The severity of Secondary Parent psychopathology, both overall and for Axis II, appears to bear no relationship to the levels of child and family disturbance, according to these correlational analyses. Moreover, severity of Primary Parent psychopathology (overall and Axis II) bears no relationship to child disturbance and, as demonstrated in the main study, relates only to parent ratings of family dysfunction (see Table 3, $p < .05$).

In summary, post-hoc analyses were performed in two areas of concern. First, correlations were run to ascertain the extent to which dependent variables were associated, or the degree to which various ratings of child and family disturbance were related. The data reflected that most reports of child behavior had some association with each other (five out of six were significantly related), such that parents, teachers, and clinicians tended to assess
higher or lesser behavior disturbance convergently. Only parent and teacher ratings lacked a significant association.

Family functioning correlations were computed to address whether parent and clinician perceptions were significantly associated. Primary Parent perceptions of family disturbance were not related to clinician assessments of the family, although clinicians rated a narrow area of family functioning: degree to which the parent was impaired in the ability to set consistent, appropriate limits on the child.

Perceptions of family functioning were also compared to child behavior ratings with Pearson correlations. Clinician ratings of the family were significantly associated with clinician and parent ratings of the child, such that more parental impairment in limit setting was related to greater child behavior disturbance from both the parent's and the clinician's perspective.

The second area investigated in these post-hoc analyses was psychopathology in Primary versus Secondary Parents and the degree to which either correlate with child and family dysfunction. A binomial test indicated that a significantly higher percentage of Secondary Parents were psychologically disturbed (100%) than were Primary Parents (65%) in the sample. Student t tests revealed that Secondary Parents had, on the average, more severe levels of general psychological disturbance (Axis I and II pathology).
On the other hand, the relatively more frequent and severe levels of Secondary Parent disturbance did not appear to have meaningful connections to child and family functioning, as higher rates of psychopathology (overall and Axis II) for Secondary Parents were not associated with greater child and family disturbance. Consistent with the findings of the main study, higher degrees of psychopathology (overall and Axis II) for Primary Parents were associated only with parental perception of greater family dysfunction. The post-hoc finding that significant associations with child and family functioning did not occur for Secondary Parents seems to support the use and emphasis placed in this investigation upon Primary Parents.
CHAPTER V
DISCUSSION

Summary of Findings

The first two hypotheses of the main study, which predicted that disproportionately high rates of personality disorders would occur in this population of parents with emotionally disturbed children, were supported. Significantly more parents suffered from Axis II disorders than from Axis I disorders. For the parent sample as a whole, 22% of those with a psychological disorder were characterologically disturbed. The frequency of personality disorders observed in this sample also greatly exceeded that of the general population, as expected. Sixty percent of the sample were character disordered, as opposed to the 11.1% base rate in the United States (Reich et al., 1989). In fact, as discussed in the literature review, this criterion base rate estimate is somewhat liberal. Other epidemiological studies give prevalence figures as low as 2 to 4% (Weissman, Myers, & Harding, 1978).

Most of the other predictions of the main study were not confirmed. Ratings of child behavior disturbance did not vary by parental diagnosis. On the other hand, while clinician perception of family dysfunction did not vary
according to whether a parent was "normal", Axis I, or Axis II disordered, parental perception of family functioning did co-vary significantly with parental diagnosis. Primary Parents with character disorders considered their families to be significantly more dysfunctional, or impaired in more areas of functioning, than did non-disordered Primary Parents. There was no discernable difference between the self-perceived level of dysfunction in families with a personality disordered Primary Parent and families with an Axis I disordered Primary Parent.

Regarding differences within the Axis II parent group, neither Millon's two-part division nor the DSM III-R cluster groupings showed a significant relationship to levels of disturbance in children and families. Cluster groupings also lacked correspondence to types of child symptomatology exhibited in the population. One trend was observed, however, suggesting that children of Cluster B parents (adults with an "erratic" form of personality disorder) may tend to exhibit more externalized symptoms, such as aggressive behavior. It should be noted that the number of parents falling into Clusters A and B were too few to conduct some comparative analyses. In general, the results of this adjunct study are preliminary and tentative, due to the small number of cases available. In order to compare more conclusively these cluster sub-groups, a larger sample size would be required.
Post-hoc analyses investigated the degree to which teacher, parent, and clinician ratings of children and families were correlated. The data reflected that most reports of child behavior were congruent (five out of six were significantly related), such that parents, teachers, and clinicians tended to assess higher or lesser behavior disturbance convergently. (Only parent and teacher ratings lacked a significant association.)

Parental perceptions of family disturbance were not related to clinician assessments of the family. This lack of association between parent and clinician ratings is not surprising, as the reports were actually measuring different things. The parents were asked to rate broad areas of family functioning, while the clinician assessed one specific variable: degree to which the parent was impaired in the ability to set consistent, appropriate limits on the child. Despite their narrow focus, clinician ratings of the family were significantly associated with clinician and parent ratings of the child, such that greater parental impairment in limit setting was related to higher levels of child behavior disturbance from both the parent's and the clinician's perspective.

Another area of results that was explored concerned the frequency and severity of psychopathology for Primary versus Secondary Parents (step-parents or biological fathers in intact families), and the degree to which their pathologies
correlated with child and family dysfunction. A significantly higher percentage of Secondary Parents had clinical disorders (100%) than did Primary Parents (65%) in this population. Secondary Parents also had, on the average, more severe levels of psychological disturbance. Both relative frequency and severity of pathology, therefore, was greater among Secondary Parents than Primary Parents.

On the other hand, Secondary Parent disturbance did not appear to have meaningful connections to child and family functioning, as higher rates of psychopathology (overall and Axis II) for Secondary Parents were not associated with greater child and family disturbance. It should be taken into consideration, however, that there were few two-parent families in the sample, so that the Secondary Parent group was quite small. The low degrees of freedom involved in this analysis indicates poor power for detecting whether a correlation actually exists. Thus, this result should not be considered to be conclusive. Consistent with the findings of the main study, higher degrees of psychopathology (overall and Axis II) for Primary Parents were associated only with parental perception of greater family dysfunction.

As expected, there were no significant differences between single-parent and two-parent families for any of the dependent variables used in this study, nor did parental
mental health status differ by marital status. Gender of IP also was not associated with different levels of child, family, or parental disturbance.

Interpretation of Results

Main Study Implications

The major premise of this study was supported by the data; that is, psychological disorders in children occur frequently within the context of a family with one or more characterologically disturbed parents. In fact, the observed prevalence of parental Axis II disorders, either alone or in conjunction with Axis I conditions, was remarkably high in this population, almost six times more frequent than in the general population. Even though a conservative scoring criterion was applied to the diagnostic measure, the rate of character pathology exhibited in this population was equal to or greater than rates found adult outpatient and inpatient treatment samples (see Chapter II; Pfohl et al., 1984; Shea et al., 1987; Rutter & Quinton, 1984).

Although many of the other predictions in the study were not confirmed, the implications of this finding alone are of great import. The basic notion that a large percentage, perhaps a majority, of psychologically disturbed children come from families with a personality disordered parent, is a weighty revelation. Clinical practitioners
have undoubtedly noted or suspected this trend, but it has not before been empirically documented. The implications of this result are germane to research, theory, and treatment of childhood psychopathology.

The first point that can be taken from these results relates to research. The data indicate that, if empirical studies of psychological disturbance in children are to focus on parental mental health variables at all, Axis II disorders should be given much more attention. Previous research has generally assessed parents only for Axis I conditions such as depression, which were found to be less common this population; 92% of disordered parents had a significant personality disturbance, while only 40% of disordered parents had an Axis I diagnosis. This finding clearly connotes that more of the co-morbidity variance is accounted for by Axis II, or by their concomitant social and economic strains, than by Axis I conditions.

The data did not reflect that children within a clinical population were more severely impaired if their parents had an Axis II versus an Axis I condition. The data did evidence, however, that child dysfunction is more frequently associated with Axis II rather than Axis I pathology; that is, more children in a clinical population will have this factor in common -- that one or more of their parents suffer from a personality disorder. Given the extraordinarily high rate of character pathology found in
this parent sample, it is clear that the link between parental Axis II and psychological disorders in offspring must be further investigated to study the factors or mechanisms that both cause and protect children from comorbidity. Such research might point to preventive measures that, if implemented, could dispel the cycle of emotional damage that appears to take place in afflicted families.

Secondly, it is interesting to note that the etiology of this observed relationship between parental personality disorders and psychological disturbance in children cannot be explained in a "bottom-up" manner. Phenomena such as higher rates of maternal depression in families with psychologically disordered children may, in part, be related to the stress of caring for such a child. Parental Axis II disorders, on the other hand, cannot be precipitated in that way. Child-rearing stress could certainly exacerbate the severity of character pathology, but having a child, even an emotionally impaired or challenging one, could not, by definition "cause" a personality disorder.

The etiology of personality pathology is not known. Environmental stressors surely play a role, but these stressors must occur prior to adulthood, as diagnostic criteria include a qualifier that pervasive, problematic character patterns should not have begun with a sudden change, but must have been on-going (Waldinger, 1984). Thus, the personality disordered adult displays maladaptive
or rigid patterns of coping which should be apparent throughout his/her adult life.

Moreover, converse to what is often found with Axis I disorders, a pre-morbid and post-morbid differentiation can not, typically, be made for the personality disordered individual. There is no clear onset or marked change. Rather, a failure to develop or mature in one's social and occupational functioning is more typically observed. So, although the beginning of adulthood may coincide in time with parenthood, character pathology is not, in theory, "caused" by that or any other single stressor. Instead, predominant theories tend to attribute personality pathology to complex interactions of interpersonal (Masterson, 1976; Millon, 1981) and perhaps biological (Millon, 1981; Millon & Everly, 1985) factors beginning in the individual's childhood.

Thus, it is illogical to conjecture that a parent's personality disorder is due to the birth of a child or onset of the child's symptoms, whereas the hypothesis might easily be made for parental Axis I disorders. It is possible, for example, that the stress of caring for a hyperactive or aggressive child might precipitate depression or even psychosis in a parent who is genetically or congenitally prone to mental illness.

On the other hand, the fact that bottom-up causality is negated in the association between parental character and
child psychological disorders does not conversely indicate that the etiology is directly top-down. While the parent's personality limitations undoubtedly debilitate their judgment, parenting skills, and general interpersonal functioning with the child, these factors are not necessarily responsible for the child's disturbance. The high rate of child psychopathology found in this familial context, may be rooted in anything from the former variables, to genetic transmission, to the social disadvantages often accompanying or created by the parent's maladaptive coping patterns, and to any combination of these factors.

Whatever the causes or mechanisms may be for the high rate of co-morbidity between adult character pathology and psychological disturbance in children, it poses serious problems. Personality disorders are relatively intractable, even with intensive psychotherapy. Depending on the level of severity and the pervasiveness of the character disturbance, the most that is accomplished in psychotherapy, typically, is that the patient's more extreme symptoms are modulated or relieved. Marked changes in general aspects of interpersonal behavior or coping methods are rare.

These sobering facts about Axis II disorders, integrated with the findings of this study, indicate that a large percentage, if not a majority, of children who are presented for psychological treatment have parents who are
not only disturbed themselves, but impaired in such a way that will be chronic, even with psychotherapy. In this majority of child treatment cases, the parent will be highly limited not only in their current capacity to appropriately manage and nurture the child, but, in their potential to ever do so.

This leads to the issue or challenge of how to effectively treat the child within this family context. It must be acknowledged and understood among child clinicians that parents who present their children for psychological services are generally a "clinical population", themselves, even though they may have no treatment history. While family system theorists and clinical practitioners have, for many years, warned against the assumption that the child is the sole or primary patient, the results of this study suggest something more specific and, perhaps, stronger. These findings illustrate that the child or family therapist should be prepared for the fact that, more than half the time, the parents will be a "chronic patient" in terms of character pathology.

While a critique of treatment approaches is beyond the scope of this paper, certain assessment and treatment recommendations can be made on the basis of the facts and implications above. First, given the contemporary restraints on funding and, therefore, length of outpatient treatment episodes, child and family clinicians must
establish efficient and routine methods of evaluating parental mental health status. Understanding, as early in the therapeutic process as possible, that the parent has an Axis II condition might aid treatment providers in more realistically choosing interventions. As Garbarino, Guttmann, and Seeley (1986) have pointed out, the more comprehensive the assessment of all aspects of child, parent, and family functioning, the better the probability of successfully treatment.

Second, with regard to treatment strategies, the relative intractability of character pathology suggests that therapeutic attempts to significantly modify such a parent's behavior will have less success and, ultimately, less impact than approaches which bolster the family system by providing extra-familial supports. This is the therapeutic strategy advocated by Cradock, Gallo, and Updegrove (1988). It takes into account not only the reality that severe, chronic parental disturbance is resistant to change, but it incorporates the empirical findings on resiliency in children (e.g., Anthony & Cohler, 1987). This research has shown that influences outside the family can have a tremendous mitigating effect on children at risk, such as children who are coping with the stress of having a mentally ill parent. Piers (1984) observed that children of personality disordered mothers tended to have more difficulty making use of external resources than did
children of psychotic mothers; however, it is not clear whether different buffers might vary in success at different developmental stages.

The other significant relationship found in the main study was that "primary parents" with an Axis II disorder perceived greater discord or dysfunction within their families than did non-disordered parents, but not discernably more so than did parents with an Axis I condition. Moreover, these parent ratings were not associated with clinician assessments of the family. On the face of it, these results could be interpreted to mean that, in general, psychiatrically disturbed parents view their families pejoratively, whether or not the negative view is justified.

This translation of the findings, however, would not be appropriate, due to certain methodological idiosyncrasies of this investigation. As mentioned above, the clinician assessment used in the study was not a fair basis of comparison to parental reports, as it was much narrower in scope and, in essence, did not evaluate the same family functioning variables as did the parents' survey. (This problem will be discussed further under "methodological considerations".) Because of the difference between parent and clinician measures, the obtained result means only that disordered parents perceived their families to be more pathological than other clinic families. The accuracy of
maternal perceptions in this population can not be determined with the data at hand. It may be that the assessment of these parents is actually correct, given that previous studies have often found evidence of greater family discord and disturbance when parents were psychiatrically impaired (see Chapter II).

What does it mean that level of child disturbance was not associated with diagnostic status of the parents? A conclusive answer to this question can not be made on the basis of this study alone. This investigation had a small sample and did not include a non-clinic control group. The true relationship between parental diagnostic status (Axis I, II or "normal" conditions) and degree of child dysfunction may have been difficult to detect in this sample, which was small enough to contain only three parent cases with pure Axis I conditions. In order to discern whether a link does exist, such that children of character disordered parents are, on the average, the most psychologically impaired in the overall population, a diverse sample including non-clinic children is needed.

Finally, as mentioned above, the data indicate that, although child psychopathology does not show a greater severity in relation to personality disorders in parents, it does show a greater frequency of occurrence, and that correlational finding is of equal or greater importance to treatment providers and society as a whole.
Adjunct Study Implications

No significant differences were found when comparing children and families on the basis of Millon's (1981; Millon & Everly, 1985) conceptualization of "mild" versus "marked" personality disorders, nor did the DSM III-R cluster groupings of "odd", "erratic", and "anxious" character pathology differentiate them. Still, this aspect of the study is worth discussion.

It should be reiterated that some of the hypothesized relationships could not be tested because of the small number of parent cases in the "odd", "erratic", and "marked" categories. Even when statistical tests could be performed, the sample size provided little power to detect associations.

These personality disorder groupings may not have yielded significant links to child and family disturbance because the categories themselves are spurious, or lacking in relevance. Interestingly, this was the feedback given by several of the 10 experts consulted for this aspect of the study. Some responded that certain disorders within a single cluster would be related to greater child or family dysfunction than the rest. For instance, parental anti-social and borderline disorders were identified as being particularly deleterious to children and families, based on the clinical observation of the experts. The validity of
these anecdotal comments about anti-social disorder are supported by empirical studies, cited in Chapter II, which consistently found connections with conduct disorder in children. In addition, the data in this study revealed a trend such that children of Cluster B parents, which includes anti-social disorders, were somewhat more externalizing or aggressive than other clinic children.

Also telling was the fact that the experts did not demonstrate a strong consensus on several survey items. They exhibited almost total agreement that "anxious" parental disorders would rank as the least damaging to children and families, but they were almost evenly divided on how to rate the other two clusters.

Divided opinions, and the tendency of many of the experts to qualify their answers, seemed related to three assertions made by various members of the panel. First, some argued that the personality diagnoses were not well categorized, or that the Millon and DSM III-R groups were not germane, for the purposes at hand. Second, some felt that predictions could only be accurate if criteria for rating child and family disturbance were finely described. Third, a few panel members disagreed with the notion that child and family dysfunction would bear any relationship to parental psychopathology, referring to the importance of many invulnerability or buffering factors.

Certainly, this third point related to intervening
variables is well taken. Child development and psychological functioning is influenced, for the better and worse, by a myriad of factors. That fact does not discount, however, the benefit derived from studying co-morbidity trends and patterns of family discord with respect to parental mental health.

Implications of Exploratory and Post-Hoc Findings

Since this was a predominantly single-parent sample, it was important to cross-validate findings with the two-parent families available. This was the general accomplishment of these analyses. The results essentially suggested that single-parent families within a clinic population are not more impaired or dysfunctional, nor are their children more disturbed. While partners or "secondary parents" in this population more frequently appeared to have psychiatric disorders, and at a more severe level of disturbance, their impairment did not relate significantly to greater dysfunction in children and families.

This latter result warrants further investigation. The gender of secondary parents was mixed, so the fact that their greater pathology lacked relationship to level of child disturbance can not be explained by traditional stereotypes about maternal or paternal roles. On the other hand, half of the parents in question, male or female, were step-parents. While the term "secondary parent" was one of
convenience, and was not intended as pejorative, it may have been accurately descriptive in some sense. The step-parents undoubtedly were less influential in the children's development, as they had only been married to the custodial parent for an average of three years. This length of time and, possibly, degree of involvement with the child might explain why their mental health status was not related to child functioning. In any case, this aspect of the study's results is not conclusive, given the small number of two-parent cases available for analysis.

Post-hoc analyses also addressed the question of whether teacher, clinician, and parent perceptions of the child and family were inter-related. This is a complicated issue because of the confounds of the inevitably varied presentations and relationships that the child and family establish with these three figures. Another confound occurs when the parent, teacher, and clinician are given different instruments with which to report their perceptions. This latter confound will be elaborated below.

In any case, it should be noted that, despite those variance factors, there was a fair amount of convergence in perceptions of children and families. Clinicians, teachers, and parents tended to agree about which children were more disturbed. This finding suggests that even psychologically disordered parents may have perceptions of the child that are generally accurate or valid, though some degree of
distortion might occur.

It was also impressive that parent and clinician perceptions of child disturbance tended to relate positively to clinician perceptions of the family. In other words, when both parents and clinicians agreed that the child was more severely disturbed, the clinician also viewed the parents as having more impairment in their ability to set appropriate limits on the child. This finding, of course, makes sense, though causality is not revealed. It is not clear whether these correlations demonstrate that parents tend to have more trouble managing severely disturbed children, or that children become increasingly dysfunctional due to parental impairment in child behavior management, or both.

Methodological Considerations

As this investigation had a different emphasis than prior co-morbidity research, it was viewed as exploratory. It was also intended to not be overly intrusive or cumbersome to the therapists and clinic sample from whom the data were derived. This objective required that some compromises be made, and latitude taken in the study's methodology. The measures and procedures used in this investigation had varied strengths and weaknesses in terms of both continuity with previous research and the empirical integrity of the instruments themselves. The following is a
discussion of the rationale for this study's methodology and the limitations of its approach.

Attention will first be focused on limitations of the sample. Given the number of dependent variables and research questions posed in the study, the sample number was low. This problem was compounded by the fact that skewed prevalences were found among parental diagnostic groups, reducing power to detect differences and making some within group investigations impossible.

Another sample limitation is related to its demographic composition. While low-income, multi-racial, urban populations are of interest, use of this type of sample raises the question of whether unique or more extreme social stressors and disadvantages confound or limit the generalizability of the findings. Cross-validation studies with diverse samples are necessary to establish whether the incidence Axis I and II disorders in parents presenting children for treatment varies geographically or by socio-economic status. It is certainly possible that the current sample contains a higher proportion of character disordered parents than a sample recruited through higher cost private practitioners, as Axis II pathology is probably over-represented among the poor.

The second area of methodological critique concerns the instrumentation used in the study. First, the Achenbach Child Behavior Checklist will be considered. Use of this
questionnaire for assessing child behavior disturbance is a relative methodological asset in a few respects. The CBCL is one of the frequently used and easily replicated measures of child psychopathology. Use of this instrument makes comparison with other investigations in the area more feasible and valid. Its use has been recommended by many respected researchers in the field because of its validity, reliability, and because it is easily understood by parents (Downey & Coyne, 1990; Walker et al., 1989).

The positive correlations found in this study between parent and clinician perceptions of the children imply that the reports of psychiatrically disordered parents may be generally valid. On the other hand, use of reports by disturbed parents is controversial. As discussed in Chapter II, authors such as Cohler, Gallant, Grunebaum, and Kaufman (1983) tend to distrust child ratings by parents with psychiatric disorders, interpreting their perceptions as distorted by their negative affect. While such distortion is certainly possible, most researchers quoted in the literature argue that ratings by disturbed parents regarding child behavior tend to appear valid when tested concurrently with clinician reports (Lachar, Kline, & Gdowski, 1987; McNeil & Kaij, 1984; Rolf et al., 1984; Sameroff et al., 1984; Walker et al., 1989). As found in this study, parental reports do not concur with teacher perceptions of the child, but teacher ratings often do not converge as well
with clinician evaluations (Yu et al., 1984). To its credit, the CBCL has a substantial body of research supporting the validity and reliability of its use, even in clinical parent populations (e.g., Friedlander, Weiss, & Traylor, 1986).

Clinician ratings of both child and family problems constituted both a strength and a weakness for this study. They were included to provide alternative perspectives to maternal self and child reports and expert views of those variables. It was beneficial to have differing points of view, especially given the level of parental pathology present in this population. The clinician ratings used, however, were developed for clinical purposes and were not empirically derived or pre-tested for validity or reliability.

Although other studies throughout the literature have included clinician ratings of presenting problems and may be comparable to the measure used for this study, the item choice and criteria for dysfunction were not modeled after other research measures. There is certainly face validity to the instrument used, but criterion validity for both therapist ratings of both child problems and family impairment was not established. The reliability of these ratings is also questionable, as agreement among raters was not tested.

On the other hand, the fact that several significant
correlations were obtained in post-hoc testing of clinician ratings suggests that their validity was adequate. For example, clinician ratings of child behavior related positively to those of parents and teachers, and clinician perceptions of parenting deficits in the family co-varied positively with greater child disturbance as assessed by the parent.

Use of the FAM for measuring parental perception of family functioning is considered to be a relative strength of this study. It is a useful instrument in its ability to evaluate both process and content aspects of family systems, and has been recommended as both an assessment and therapeutic tool (Steinhauer, 1984). It also meets several of the criteria prescribed by Fisher, Terry, and Ransom (1990) in their call for family systems research based on "multidimensional family assessment" or examination of multiple family constructs or domains of functioning.

The main limitation of the FAM is that it is a fairly new instrument, so that ample validity and reliability data have not yet been accrued. It is also a self-report measure. It thereby raises questions, as above, regarding the perceptions of psychiatrically disturbed parents and to what extent their reports should be considered distorted, perhaps a projection of their wishes or fears, or basically accurate and a uniquely knowledgeable perspective on how the family functions.
The MCMI-II was chosen on the basis of its strong theoretical and empirical foundations. The theoretical underpinnings of this questionnaire are an asset because of Millon's extensive expertise on the nature of character pathology and its defining features (Millon, 1969, 1981, 1984, 1986a, 1986b, 1990; Millon & Everly, 1985). He has also had a tremendous influence on the personality nosology used in the DSM III and III-R (1983). In creating the MCMI-II, Millon improved upon the original MCMI with the specific objective that it be consistent with the diagnostic guidelines used in the DSM III-R, and that it generate scores which correspond to DSM diagnoses (1985, 1987).

A substantial body of research documents the validity and reliability of the MCMI and MCMI-II for screening and discriminating among personality disorders (McCann, 1990; McCann, Flynn & Gersh, 1992; Millon, 1985; Millon, 1987; Retzlaff, Sheehan & Fiel, 1991), affective disorders (Choca, Bresolin, Okonek, & Ostrow, 1988; Libb, Murray, Thurstin & Alarcon, 1992; Millon, 1987), and Axis I disorders in general (Bonato, Cyr, Kalpin, & Prendergast, 1988). Good reliability or stability of factors is also frequently reported (Piersma, 1989; Retzlaff & Gibertini, 1990).

On the other hand, validity data on the MCMI, particularly the first version, are inconsistent. As mentioned in Chapter III, Piersma (1987) found that the MCMI categorized patients as personality disordered too liberally
in comparison to clinician diagnosis. Cantrell and Dana (1987) noted similar problems with over-diagnosis, concluding that the MCMI should not be used as a screening device. Particularly relevant to this study given its large minority sub-sample is the recent evidence that African Americans score significantly higher than whites on the Narcissistic, Aggressive, Paranoid, Drug, and Psychotic Delusional subscales (Hamberger & Hastings, 1992). The authors of this research admitted, however, that the data should not be taken as conclusive of racial bias, due to methodological limitations of the study. Moreover, other empirical investigations of racial differences on the MCMI have found inconsistent results (Davis, Greenblatt, & Pochyly, 1990).

Another issue that arises in assessing the convergent and construct validity of this personality measure is that the majority of studies on this topic have examined the first version of the MCMI (e.g., Widiger & Sanderson, 1987). Available data does indicate that the MCMI-II is a better instrument, including in the area of racial bias because it utilizes separate norms for blacks and whites (Choca, Shanley, Peterson, & Van Denburg, 1990; Hamberger & Hastings, 1992). The MCMI-II has also improved in its congruence with the DSM III (Millon, 1985, 1987). On the other hand, some authors have argued that with its revision it became too complex and difficult to use (Streiner &
In addition, use of a single questionnaire, however robust, for diagnostic purposes is problematic and ill-advised, especially in a clinical application. While the diagnostic accuracy of MCMI interpretive reports is sometimes praised in the literature (Green, 1982), it is never recommendable to diagnosis through computer generated test reports only, and Millon has not intended for his measure to be used in this way (1987). Nonetheless, for the sake of expedience, empirical studies often rely on single diagnostic instruments to categorize subjects.

The validity of the clinical categorizations in this study would have been greatly increased had the assessment process included the varied sources of information typically employed by clinicians. Structured or semi-structured diagnostic interviews with research subjects might have been advantageous. Previous research has shown that it is difficult to achieve adequate reliability for Axis II diagnoses, particularly using interview approaches (Mellsop, Varghese, Joshua, & Hicks, 1982; Shea et al., 1987; Spitzer, Forman, & Nee, 1979). Therapist diagnoses, behavioral observations, and social history, concurrent with the test findings, any of these would have lent credence to the diagnostic conclusions made. Multiple information resources are particularly crucial to the accuracy of personality research, as social history and interpersonal behavior are a
cornerstone of diagnosis and difficult to capture in a self-report instrument. In the present study, unfortunately, much of this adjunct data could not be collected, due to time, funding, and labor constraints.

In summary, the methodological weaknesses of this investigation were related primarily to sampling and instrumentation deficits. While the clinical measures used have demonstrated reasonable validity, some compromises were made to minimize demands on therapists and patients at the child guidance center at which data was collected. This is a common issue for research in applied settings, where treatment takes appropriate precedence over research.

Suggestions for Further Research

Several recommendations for further study were made above. Perhaps the starting point for research in this area of child and family correlates of parental personality disorder would be to investigate broader populations, including non-clinic control groups. Secondly, these studies might include DSM III-R diagnoses of children among the dependent variables examined. Such research would provide more comprehensive information than currently available on whether patterns of concordance exist between parental Axis II disorders and Axis I disorders in children.

Thirdly, future studies might include a structured family observation component. While clinician ratings of
child management skills in this study provided objective information on one variable, further research could include more extensive observational data. One dimension of particular interest is the extent to which parents with specific personality disorders might tend to display greater degrees of negative, hostile affect toward their children, as affective tone in the parent-child relationship is believed to be a key factor in child adjustment.

Top-down studies of character disordered adults who are in outpatient and inpatient treatment modalities would be a beneficial addition to the literature in providing another index of risk to children. In other words, there is a need for epidemiological studies that would identify the prevalence rate of various psychological disorders for children of parents who are Axis II disordered. Longitudinal studies of this kind would be particularly informative.

Also interesting would be studies that compare paternal and maternal associations with child psychopathology. This research comparison is compelling in that inconsistent trends have been reported in the literature on differences by gender of parent. For instance, Thomas and Forehand (1991) found that there was a significantly stronger relationship between paternal depression and adolescent functioning than for maternal depression. On the other hand, Merikangas and her associates (1988) found that, while
paternal depression was related to an increased risk for anxiety disorders in their offspring, paternal disorders were generally not as strongly associated with the mental health of their offspring as were maternal diagnoses. These questions have not received any attention with respect to gender specific transmission of personality disorders, although conduct disorder research seems to indicate that anti-social character pathology is inter-generationally linked through males.

Most importantly, future research should attempt to isolate the most crucial variables accounting for the correlation between parental character disturbance and psychological dysfunction in children. For instance, is it certain parental personality disturbances that put children most at risk? Is childhood psychological disturbance primarily related to specific parenting deficits common to care-takers with character disorders? How much of the strong association between parental personality disorders and child psychopathology is genetic? Or, is most of the correlation simply due to high rates of divorce, separation or loss of parent, abuse or neglect of the child, or other traumas that occur in families when one or more parent is character disordered?

These questions harken back to the ideas raised by Downey and Coyne (1990) and many others in this line of research. They hypothesized that key determinants of risk
to children were factors such as parental hostility or emotional abuse, rather than "diagnostic specificity" (Merikangas et al., 1988). They may very well be correct. It is the suspicion of this author that the high rate of association between psychological disturbance in children and personality pathology in parents is a complex interaction of the phenomena above. The results of this study suggest that interpersonal dynamics and familial adversities commonly associated with parental character pathology would be a fruitful avenue of research. As the most crucial risk factors for child psychopathology are identified, so too must improved preventive and treatment interventions be conceived.
REFERENCES


Please follow the forced-choice format for all items:

1) Theodore Millon suggests that personality disorders fall into two categories of severity:

Markedly Severe
Schizotypal
Borderline
Paranoid

Mildly Severe
Anti-social
Narcissistic
Histrionic
Dependent
Passive Aggressive
Obsessive Compulsive
Avoidant
Schizoid

Assuming that this division is valid, do you expect that children of these "markedly" disordered parents would be significantly more disturbed than children of "mildly" disordered parents? (Check one.)

____  Yes.
____  No, there would be no discernable difference.

2) The DSM III-R divides personality disorders into 3 clusters:

A  B  C
paranoid  anti-social  avoidant
schizoid  borderline  dependent
schizotypal  histrionic  obsessive compulsive
                        narcissistic  passive aggressive
                        (sadistic)  (self-defeating)

kids: ________  ________  ________

family: ________  ________  ________

a) On the lines marked "kids", please rank order the level of disturbance you would expect to find in children of parents from each of these groups, with a rating of 1 being the most severe and 3 the least.
b) On the lines marked "family", please rank order the general level of dysfunction you would expect to find in families of parents from each of these groups, with a rating of 1 being the most severely dysfunctional.

For the following items, circle your best guess:

3) Thinking of Achenbach’s Child Behavior Checklist (CBCL), or simply the terms "internalizing" and "externalizing", would you expect the symptoms of Group A’s children to be:
   x) primarily internalizing
   y) primarily externalizing
   z) about equally internalizing and externalizing

4) Would you expect the symptoms of Group B’s children to be:
   x) primarily internalizing
   y) primarily externalizing
   z) about equally internalizing and externalizing

5) Would you expect the symptoms of Group C’s children to be:
   x) primarily internalizing
   y) primarily externalizing
   z) about equally internalizing and externalizing
APPENDIX B

RESEARCH CONSENT FORM
Statement of Informed Consent

I understand that I have agreed to fill out a set of questionnaires that have clinical value. I understand that this information is being routinely collected by the center as part of the standard intake procedure. I agree to have that and other information from my clinical file used for research purposes as well.

I understand that my name will not be used on any research documents. All information and records will be strictly confidential.

I understand that my participation is voluntary and that I may decide to discontinue my participation in the research at any time without penalty. I understand that if I do not participate in the research, my decision will in no way affect the services that I or members of my family receive.

I affirm by my signature that this statement has been read by me and that my questions have been answered.

I agree to participate in the study.

I do not agree to participate in the study.

_________________________    ____________________________
parent or guardian          parent or guardian

_________________________    ____________________________
parent or guardian          parent or guardian

_________________________    ____________________________

_________________________    ____________________________

_________________________    ____________________________

_________________________    ____________________________

_________________________    ____________________________

_________________________    ____________________________

_________________________    ____________________________

_________________________    ____________________________

_________________________    ____________________________

_________________________    ____________________________

_________________________    ____________________________

_________________________    ____________________________

date

_________________________

witness
APPENDIX C

CLINICIAN RATING FORM
IP Name: Parent
Clinic #: Research Consent?: Yes No
Siblings (Name, age, sex):
Referral Source:

Clinician(s):

IP Problem(s)
(Circle number of all that apply; Rate intensity)

<table>
<thead>
<tr>
<th>Problem</th>
<th>Mild</th>
<th>Moderate</th>
<th>Severe</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Academic problem</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2. Acute or chronic drug or alcohol abuse</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3. Aggressive/dangerous behavior (includes knife wielding, fighting at home or school, etc.)</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4. Arson/firesetting</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>5. Attention problems</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>6. Bizarre, possibly psychotic behavior</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>7. Dependent behavior</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>8. Depression or lethargy</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>9. Developmental delays in sensory, motor, language skills. Specify</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>10. Discipline problem in the home</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>11. Fearfulness/apprehension</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>12. Inappropriate sexual behavior</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>13. Learning disabilities</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>14. Lying</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>15. Peer relationship problems</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>16. Running away</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>17. School behavior problem</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>18. School phobia/truancy</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>19. Self-destructive/suicidal thinking, plans, actions</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>20. Theft/vandalism</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>21. Wetting or soiling self</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>22. Withdrawn behavior</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>23. Other</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

Family Problem(s)

<table>
<thead>
<tr>
<th>Problem</th>
<th>Mild</th>
<th>Moderate</th>
<th>Severe</th>
</tr>
</thead>
<tbody>
<tr>
<td>24. Acute or chronic drug or alcohol abuse by family member</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>25. Bereavement/Death of family member, relative</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>26. Child abuse and/or neglect</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>27. Divorce or separation of parents</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>28. Imminent psychiatric hospitalization of family member</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>29. Inability of parents to set minimal appropriate limits</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>30. Other</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

HIGH-RISK/CRISIS ASSIGNMENT?  ___ NO  ___ YES
DISSERTATION APPROVAL

The dissertation submitted by Peggy Wingo has been read and approved by the following committee:

Dr. Alan DeWolfe
Professor, Psychology
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Dr. Rosalyn Chrenka
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The final copies have been examined by the director of the dissertation and the signature which appears below verifies the fact that any necessary changes have been incorporated and that the dissertation is now given final approval by the Committee with reference to content and form.

The dissertation is, therefore, accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Clinical Psychology.

Date 8/22/93

Director's Signature