THE EFFECT OF RELATIONSHIP SUPPORT AND PARENTING STYLE ON EXTERNALIZING AND INTERNALIZING BEHAVIORS OF CHILDREN WITH ADHD

DISSERTATION DEFENSE

Presented to the Graduate Council of the University of North Texas in Partial Fulfillment of the Requirements

For the Degree of

DOCTOR OF PHILOSOPHY

By

Frances Walker, B.B.A., M.B.A., M.S.
Denton, Texas
August, 1995
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Influences between quality of intimate heterosexual relationships, parenting style, and externalizing and internalizing behavior problems of children with Attention-deficit Hyperactivity Disorder (ADHD) were examined in a sample of intact and single parent families. The perspective on marital quality was expanded to include an examination of intimate adult relationships within single parent households. Associations between the quality of custodial parents’ serious dating and/or cohabiting relationships, parenting style and the behavior problems of children with ADHD were studied. Results from this study found tentative support for previous findings that family functioning may mediate the development of conduct disorders among children with ADHD.
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CHAPTER I

INTRODUCTION

In today's society, about half of all children experience the divorce of their parents and spend an average of five years in a single-parent household (Glick & Lin, 1986). Many of these divorced parents (72% of women and 80% of men) remarry (Glick, 1989). The ramifications of these changing relationships include diverse patterns of family reorganizations. For example, children must adjust to having only one parent for support and guidance. Further, most of these children will have to readjust to a new parental figure whether it be in the form of a stepparent or a serious dating partner of the custodial parent. These dating partners may or may not play a significant role in the lives of these children of divorce.

There is evidence that children of divorce are at risk for a variety of psychological problems (Biederman, Faraone, Keenan, Knee, & Tsuang, 1990; Hetherington, Cox, & Cox, 1982; Wallerstein & Kelly, 1980). However, researchers now question whether parental divorce itself is necessarily harmful for children (Block, Block, & Gjerde, 1986; Lamb, 1977). The idea that divorce will probably be devastating for the children has influenced many couples to remain
unhappily married for the sake of these children. Yet, some research (Block, Block, & Gjerde, 1986; Hetherington, 1981) indicates that behavioral problems in the child may be manifested while the family is still intact. These findings have led to an examination of how marital conflict can negatively affect child behaviors. This line of research suggests that parental conflict contributes to the development of child psychopathology, especially externalizing behaviors (i.e., Attention-deficit Hyperactivity Disorder, Oppositional Defiant Disorder and Conduct Disorder).

More recently, researchers have extended their work on family interactions to include stepfamilies. However, to date, little research has been conducted to examine how other types of intimate heterosexual relationships (e.g., full and partial parental cohabitation and serious dating) may affect family interactions. Just as quality and support may vary within marriages, it seems likely that the quality of nonmarital relationships varies. The partner support and the quality of these intimate adult relationships is likely to be associated with parenting skills and manifestation of child psychopathology as within marital relationships. The purpose of the present study was to examine the interrelationships between quality of intimate heterosexual relationships, mothers’ parenting style, and externalizing and internalizing behavior problems of children with ADHD in
a sample of intact and mother-headed single parent families. A secondary purpose of the study was to expand the perspective on relationship quality to include an examination of intimate adult relationships within both intact and mother-headed single parent households.

**Internalizing and Externalizing Disorders of Childhood**

Behavioral and psychological problems in children can take on many different forms. Children may display behaviors that appear maladaptive and cause parents, teachers and sometimes the children themselves to make judgments that something is wrong. These problems can be manifested in different forms and stem from multiple influences including biological structure, genetic inheritance, social and emotional factors, family, social class and culture. Some examples of behavioral and psychological problems in children include excessive shyness, anxiety, as well as disobedience, aggression, temper tantrums, overactivity, and delinquency (Achenbach & Edelbrock, 1978).

The classification of dysfunction in children can be exhibited along two different dimensions (e.g., behavioral vs. emotional, externalizing vs. internalizing, undercontrolled vs. overcontrolled). Characteristics associated with internalizing disorders include depression, hypersensitivity, anxiety, withdrawal and shyness. Common diagnoses for internalizing disturbances include depressive
and anxiety disorders. Until recently, some of the internalizing disorders (e.g., depression) have received little attention by researchers and clinicians (Wickens-Nelson & Israel, 1991). One reason for this inattention is that children with these disorders often do not act out in antisocial ways. Children with internalizing disorders often experience internal dysphoria which may not attract the attention of teachers and parents. As a result, depressed children are less likely to be identified and receive services because parents and teachers do not perceive their problems as being disruptive.

Kazdin (1989) found differences between depressed and nondepressed children and between parent and child reports of depression. Depressed children, compared to nondepressed children, were more hopeless, had lower self-esteem, made more internal attributions regarding negative events and were more likely to believe that control was due to external factors rather than to themselves. However, when depression was defined by parent report, parents of depressed children reported the presence of objective symptoms. Some of these symptoms included: showing less pleasure and enjoyment, behaving in more deviant ways across a wide range of symptoms, and being less social. Hence, there is evidence that parents may be more able to accurately report external symptoms of depression, while children are better able to report their subjective symptoms. Within community samples
prevalence rates indicate that 2 to 5 percent of children may suffer from major depression. Within clinical populations these estimates typically jump to between 10 and 20 percent (Puig-Antich & Gittelman, 1982).

In contrast to the internalizing disorders, externalizing disorders are characterized by behavior that is socially disruptive and is often more distressing to others than to children with the disorder. Children who evidence externalizing behavior problems constitute the majority of school-aged referrals for mental health evaluation and treatment (Ross & Ross, 1982). Externalizing disorders include Attention-deficit Hyperactivity Disorder (ADHD), Oppositional Defiant Disorder (ODD) and Conduct Disorder (CD).

Conduct Disorder is manifested by delinquency, aggression, poor school performance and behavior that violates the rights of others (American Psychiatric Association, 1994). Studies of prevalence of a Conduct Disorder in the general population of children often report rates of around 4 to 6 percent with a male to female ratio of 3.2 to 1 (Anderson et al., 1987; Offord, Adler, & Boyle, 1986).

Oppositional Defiant Disorder is characterized by disobedient behavior and opposition to authority figures that persist even when they are destructive to the child's interests or well-being. It has been estimated that
approximately 6 percent of the general population of children manifest symptoms warranting a diagnosis of Oppositional Defiant Disorder. Prevalence ratios indicate a high ratio of boys to girls of about 2 to 1 (Anderson et al., 1987).

ADHD manifests itself in early childhood as: brief attention span, impulsiveness, distractibility, excitability, and poor academic functioning. It is a major clinical and public health problem estimated to affect 6 to 9 percent of school age children (Shaywitz & Shaywitz, 1988). Studies (e.g., Anderson et al., 1987) indicate that ADHD is the most prevalent disorder among children and a high ratio of boys to girls (5 to 1) suffer with the disorder. The symptoms of ADHD have a disruptive effect on all major social environments (Lambert, Sandoval, & Sasson, 1978) and have been considered to severely strain the parent-child relationship (Ross & Ross, 1982). However to date, ADHD is a poorly understood, heterogeneous disorder of unknown etiology (Biederman et al., 1990).

The Diagnostic and Statistical Manual of Mental Disorders-Revised (DSM-IV) (APA, 1994) refers to the aforementioned externalizing disorders as Disruptive Behavior Disorders. A high rate of comorbidity has been found among the externalizing disorders. The essential features of ADHD include a developmentally inappropriate degree of inattention, impulsiveness, and hyperactivity.
The essential feature of Oppositional Defiant Disorder is a pattern of negativistic, hostile and defiant behavior. The essential feature of Conduct Disorder is a pattern of conduct in which societal rules and the rights of others are violated. Both Conduct Disorder and Oppositional Defiant Disorder involve a pattern of oppositional, defiant and aggressive behaviors (Fischer, 1990; Loney, 1987). Hence, Oppositional Defiant Disorder and Conduct Disorder both involve hostile behaviors, while ADHD does not stipulate the presence of hostile behaviors. The distinctions between Oppositional Defiant and Conduct Disorder are especially ambiguous, as "all of the features of Oppositional Defiant Disorder are likely to be present" (American Psychiatric Association, 1994, p. 93) in a child with Conduct Disorder, and therefore a diagnosis of Conduct Disorder preempts the diagnosis of Oppositional Defiant Disorder. Some researchers (e.g., McMahon & Forehand, 1988) assert that Oppositional Defiant Disorder and Conduct Disorder are manifestations of a similar problem with Oppositional Defiant Disorder being the early manifestation and Conduct Disorder being the more serious disorder thought to develop later in the child’s life. Therefore, because both Oppositional Defiant Disorder and Conduct Disorder involve manifestations of aggressive and oppositional symptoms, these two disorders will be referred to under the heading conduct disorders for purposes of this paper.
Studies have indicated that in both clinic and community samples, the symptoms of these disorders covary to a high degree (APA, 1994). In a recent study (Keller et al., 1992), 35% of children diagnosed with a disruptive behavioral disorder (i.e., ADHD, CD, ODD) received more than one disruptive behavior disorder diagnosis. Hinshaw (1987) found that depending on the sample, 30 to 90 percent of children in the category of ADHD will also be classified with a conduct disorder.

One reason for the high comorbidity of the disruptive behavior disorders is their similar manifestations. In addition, there is also evidence that psychosocial variables including family interaction may be more strongly related to the development of conduct disorders (Loney, 1987; Schachar & Wachsman, 1991; Wickes-Nelson & Israel, 1991). Specifically, Schachar and Wachsmuth (1991) found considerable dysfunction in the relationship between parents and their children with both ADHD and a conduct disorder, but not in the relations between parents and their children with only ADHD. Parents of children with only ADHD did not report any significant family dysfunction in the areas of task accomplishment, communication, role performance, affective expression and involvement, control and values, and norms. In contrast, a clear relationship was found between a conduct disorder and elevated levels of dysfunction. In comparison to parents of children with ADHD
only, parents of children with only a conduct disorder or both a conduct disorder and ADHD were found to report greater problems with their sons. The authors asserted that psychosocial factors (e.g., family functioning) mediate the development of a conduct disorder among ADHD children. It is asserted that the development of aggressive tendencies associated with a conduct disorder, but not ADHD may be a result of an environmental variable like disrupted family functioning. Family relationship problems are likely to appear in families in which the parents raise their children in an environment of marital discord or separation.

It should be noted that earlier studies have consistently found a strong correlation between lower socioeconomic class and aggression and antisocial behavior in children (Bettelheim, 1952). Offord, Alder, and Boyle (1986) found a link between being on welfare/living in subsidized housing and conduct disorders. However, they note that the link is probably not a direct one. They assert that the link is likely to be mediated by family discord and disturbed family functioning. Other research (Schachar & Wachsmuth, 1991) has found an effect for disturbed family functioning even when socioeconomic class has been controlled.

Studies addressing the externalizing disorders, particularly ADHD, have largely ignored potentially contributory psychosocial factors which may lead to the
development of aggressive behaviors associated with a conduct disorder. Further, patterns of family interaction may play a critical role in the onset, maintenance, and/or severity of ADHD symptoms as well as the development of aggressive symptoms associated with a conduct disorder (Jensen, Koretz, Locke, Schneider, Radke-Yarrow, Richters, & Rumsey, 1993). Regrettably, such studies are underrepresented in the literature. One reason for this oversight may be the emphasis placed on finding a primary biological or genetic etiology for ADHD.

Studies suggest that a genetic component is related to the development of ADHD, as overrepresentations of psychiatric diagnoses including alcoholism (Stewart, DeBlois, & Cummings, 1980) and sociopathy (Morrison, 1980) have been found among biological fathers of children with ADHD. For example, Biederman et al. (1990) found that fathers of clinically referred ADHD children and adolescents showed a higher than expected history of having had ADHD themselves as children. Sixty-four percent of ADHD children had at least one relative with ADHD compared with only 24% of the psychiatric control children and 15.4% of the normal control children. Hence, parents who suffered with ADHD during childhood appear to be at a greater risk of having children with ADHD. This study also reported that parents of these ADHD children were more likely to be divorced or separated (37%) than parents of normal children (11.5%) or
parents of children with other psychiatric problems (11.5%) (e.g., affective disorder, anxiety disorder). However, this study did not differentiate between children with ADHD only and children with ADHD and conduct disorders. Thus, it seems likely that genetics or familial history may interact with the psychosocial variable of marital separation in contributing to the development of ADHD, especially when ADHD is accompanied by the aggressive and oppositional features of the conduct disorders. It is therefore important to explore the role of psychosocial factors as well as genetic factors which may be related to ADHD and conduct disorders.

Marital Functioning and Externalizing Behaviors

To date, the studies with ADHD children that have examined the psychosocial factors of marital status and marital quality find a relationship between ADHD and disturbed family environment. Specifically, ADHD has been associated with marital distress (Befera & Barkley, 1985; Bond & McMahon, 1984; Cohen & Minde, 1983; Cowan, Cowan, Heming, & Miller, 1991; Emery, 1982), and with separation and divorce (Biederman et al., 1986; 1990). In families with hyperactive children, mothers reported more marital discord compared to mothers of normal children (Befera & Barkley, 1985). Biederman et al. (1990) reported that parents of ADHD children were more likely to be separated or divorced compared to parents of normal children and parents
of children with psychiatric diagnoses other than ADHD (e.g., affective or anxiety disorders). In another study (Barkley, Fischer, Edelbrock, & Smallish, 1990), more than three times as many mothers of hyperactive children were separated or divorced from the biological father than were mothers of normal controls. Schachar and Wachsmuth (1991) found that compared to normal controls, children with ADHD and children with ADHD and/or a conduct disorder were more likely to be currently living in non-intact families, and were more likely to have experienced prolonged separations from both mothers and fathers at some time during their lives.

The relationship between ADHD and both marital discord and marital separation can be explained in several different ways. Both genetic inheritance and marital problems may contribute to ADHD development. Fathers diagnosed with ADHD as children are likely to exhibit more psychopathology (e.g., antisocial personality disorder and or development of substance abuse problems) in adulthood (Morrison, 1980; Stewart, DeBlois, & Cummings, 1980). The increased psychopathology in parents who suffered with ADHD as children may contribute to marital separation, as these parents have difficulty maintaining healthy adult relationships. It is also likely that parents with ADHD as children have poor parenting skills. For example, a parent who had ADHD symptoms as a child may still have difficulty
delaying gratification or controlling his or her temper and therefore may provide a poor role model for children who are already at risk for ADHD symptoms due to a genetic component (Campbell, 1990). Therefore, it seems possible that parents of ADHD children may be prone to marital and parenting difficulties if one of the parents (most typically the father) had ADHD as a child.

It is also possible that poor family adjustment (e.g., divorce, marital discord) may be unrelated to a parental genetic contribution to ADHD, but may contribute to a nongenetic environmental contribution of ADHD. Hence, marital discord may lead to greater behavior disturbance in children (Emery & O’Leary, 1982). Based upon Schachar and Wachsmuth’s (1991) findings, this form of ADHD would likely involve conduct disorder problems also. In this scenario, externalizing symptoms of both ADHD and the conduct disorders can develop from psychosocial factors alone. The finding that both lower social class and marital separation increased the risk for ADHD in families without a familial history of the disorder (Biederman et al., 1990) suggests that psychosocial adversity may result in a form of ADHD which is unrelated to genetic factors. In this case parenting skills might be impaired due to a parent’s preoccupation with marital strife. In the case of divorce, the custodial parent’s parenting skills may be detrimentally affected due to increased responsibilities and concerns
regarding economic and parenting matters. In both scenarios, poor parenting skills are likely to contribute to the development and maintenance of ADHD symptoms along with the addition of aggressive and delinquent behaviors.

A final explanation for the relationship between marital discord and/or separation and ADHD symptoms is that the presence of a hyperactive child can strain the marriage and contribute to the decision to separate or divorce (Befera & Barkley, 1985). In this case, the interaction between the parent and child characteristics consistent with ADHD (e.g., impulsivity, difficulty following directions, inattentiveness) and the conduct disorders (e.g., aggressiveness and disobedience) make parenting, and marital stability especially difficult. The increased parenting stress associated with raising an ADHD child (Anastopoulos, Guevremont, Shelton, & DuPaul, 1992) may exceed the resources available to the average parent and may affect the marriage in a negative way by creating disagreements about childrearing as well as increasing the overall level of distress in the home. Mash and Johnston (1983) found significantly high levels of stress in mothers and lower parenting self-esteem in both fathers and mothers of hyperactive children, while Fisher (1990) found that parents of ADHD children also reported significant distress compared to parents of normal children. McCal (1992) reported that mothers of children with ADHD report significantly greater
levels of overall stress when compared with mothers of learning disabled or normal children. Donenberg and Baker (1993) found that parents of children with externalizing disorders reported levels of stress as high as those reported by parents of children with autism.

Two longitudinal studies (Block, Block, & Gjerde, 1986; Earls & Jung, 1987) found some support for a causal relationship between child characteristics and marital conflict and discord. Earls and Jung (1987) found that marital discord was a less powerful predictor of later behavior problems than were early temperamental characteristics of poor adaptability and high intensity of emotional expressions. Block, Block, and Gjerde (1986) found that, as many as 11 years prior to their parents' divorce, children with parents to-be-divorced showed more behavior problems than children with always-married parents. These analyses showed more consistent differences for boys than girls, as boys whose parents would later separate evidenced a pattern of problematic behaviors (e.g., poor impulse control, stubbornness, and restlessness) at ages 3, 4, and 7. If problematic childhood behaviors are demonstrated prior to divorce, it may be possible that poor parent-child interactions may already be in place prior to the divorce. In this case, it is possible that parenting a difficult child may contribute to difficulties within the marriage. Indirect support for this position is found in
Patterson's (1992) research indicating that a coercive interactive process occurs in families with children with externalizing disorders. If parents are noncontingent in their use of positive reinforcers for prosocial behavior and in their use of effective punishment for deviant behavior, perhaps they also use these same ineffective techniques in dealing with their partner. Hence, they are more likely to have parenting and relationship problems which could lead to conflict and eventual separation from the partner.

In conclusion, while the direction of the causal relationship between ADHD in children, marital status (i.e., married, separated, divorced) and marital quality is not clear, there is evidence that a relationship exists between the marital relationship and the symptoms of ADHD and the conduct disorders in children. Examining how marital status, relationship quality and externalizing disorders interact may provide needed knowledge into how disturbed families function.

Marital Functioning

While the aforementioned studies provide the basis for inferences about marital functioning in families with ADHD children, several deficits exist in the current literature. One deficiency is the tendency for researchers to equate marital functioning with marital status (married, single, divorced, widowed) (Barkley, Fischer, Edelbrock & Smallish, 1990; Befera & Barkley, 1985; Biederman et al., 1986; 1990).
Given the realities of non-traditional familial structures (e.g., stepfamilies, unmarried cohabiting, single-parent families), the previous categorical distinctions alone render little useful information for understanding complex relationship processes. Methodologically, the categorical groupings are of little use if quality of adult heterosexual romantic relationship (a continuous construct) is the salient feature impacting children. It should be noted that marital status is related to the ongoing marital process since marital discord often leads to separation or divorce. However, this is not always the case, as couples may stay together even when marital discord is high. Therefore, it is critical to examine the relative effects of the interpersonal marital process (marital conflict vs. support) as well as the effects of both traditional and non-traditional (stepfamilies or cohabitation) family status on family interactions.

Within the interpersonal intimate relationship process (whether marital or nonmarital) there exists a myriad of attributes (e.g., support, problem solving skills) which can affect the quality of that relationship (Fitzpatrick, 1988). However, all of these constructs are continuous in nature and are likely to vary over time and from couple to couple. For example, a mother may feel she is not receiving adequate support from her partner if he is preoccupied with work, but if the couple makes changes (e.g., goes to counseling or
talks about problems) the partner may become more supportive. Similarly, conflict is inevitable in close relationships (Fitzpatrick, 1988). One's ability to resolve conflict is also a continuous construct which can be an important component in determining the couple's relationship satisfaction as well as affecting overall family functioning.

"Partner support" is associated with acceptance, nurturance and love. Support is "to promote the interests or cause of" (Merriam Webster Dictionary, 1989, p. 1186). This definition implies that the partner provides help and assistance when needed. It is likely that relationship and parenting support will be associated with positive child outcome.

Interpersonal conflict between romantic partners involves interactions in which both parties desire an outcome that the other is unwilling to provide (Fitzpatrick, 1988). This definition implies that all couples, distressed and nondistressed, occasionally engage in conflict. However, high levels of marital conflict is likely associated with marital dissatisfaction and marital separation. Conflict within a romantic relationship can arise over any subject and can be resolved in any number of ways (e.g., avoidance, compromise, aggression). Conflict can affect the child when parents engage in disagreements and arguments in front of the children. Discord between
parents, whether married, separated or divorced has been implicated in poor parent-child relationships and deviant child outcomes, especially in antisocial, aggressive problem behaviors (Bond & McMahon, 1984; Emery, 1982; Miller, Cowan, Cowan, Hetherington & Clingempeel, 1993). It is therefore hypothesized that the more aggressive the conflict becomes in front of the child the more likely the child will exhibit externalizing behaviors.

Understanding the interpersonal processes which go on within the marital relationship is critical because of the association between marital discord and/or separation and the development of externalizing disorders previously mentioned. There are several theories to explain the development of externalizing problems in children of divorced and discordant families. First, children often feel abandoned or rejected by the parent who leaves the family home. This perceived rejection may elicit feelings of anger which are likely to continue many years after the divorce if the noncustodial parent visits infrequently, or forgets special occasions. A child’s sense of loss, rejection and anger may be intensified if the custodial parent begins to work more outside of the home (either due to a desire to regain lost self-esteem or because of additional economic burdens). A child may interpret this action as partial abandonment. Similarly, when a mother becomes involved in new social and intimate relationships,
her child may have feelings of rejection if the mother does not spend as much time with the child. These feelings of rejection may be accompanied by feelings of competition and anger toward the new adults in their mother’s life (Kalter, 1987).

It has also been hypothesized that when parents experience ongoing marital discord, they may inadvertently pay less attention to their children. As a result, children exposed to ongoing marital discord may learn that acting out can be an effective way to get their parent’s attention (Patterson, 1971). Children from divorced homes are likely to have experienced this situation since marital discord is often causally related to marital separation.

Modeling is a third major etiological mechanism by which marital turmoil may affect children. Disagreements and arguments are often features of marital discord and aggression is readily imitated by children (Bandura, 1973). Therefore, if unhappy couples engage in more hostile and aggressive behavior in front of the children, it is likely that these children learn inappropriate ways to express their anger.

If indeed the development of aggressive tendencies in children is related to interparental conflict, it seems important to extend this research to other forms of adult intimate heterosexual relationships (e.g., stepfamilies, full and partial cohabitation, serious dating) to explore
the possible effects these adult intimate relationships may have on these children. More recently, researchers have begun to study stepfamilies. However, to date, the majority of studies categorize families according to marital status (e.g., married, divorced, separated). This classification strategy does not allow researchers to assess the impact of dating or cohabiting partners on the family environment. Given that about half of all children experience the divorce of their parents and spend an average of five years in a single-parent household (Glick & Lin, 1986), it seems imperative that more emphasis be placed on understanding how families function in nontraditional (e.g., cohabiting) family relationships.

As the majority of divorced parents, 72% of women and 80% of men remarry (Glick, 1989), more research has begun to study stepfamilies (Bray, 1992; Brown, Green, & Druckman, 1990). However, very little research has addressed the extent to which patterns of courtship or dating influence the child (Montgomery, Anderson, Hetherington & Clingempeel, 1992). The purpose of the present study is to include nonmarital relationships (e.g., cohabiting, partially cohabiting, dating couples) in an investigation of how adult heterosexual romantic relationships of mothers (whether they are marital relationships or not) may affect their children with ADHD and other externalizing disorders. In this way relationship support will be more accurately modelled as a
continuous construct and the reality of family life can be more accurately portrayed.

**Nonmarital Relationships**

Relationships within single-parent homes are more likely to be in constant flux when compared to intact nuclear families. For example, if the divorce has recently occurred, the custodial parent and the children must deal with the tasks of redefining their roles and relationships (Rodgers & Conrad, 1986), and adjusting to new routines (Hetherington, 1989). Further, divorce frequently impoverishes the household of a single mother which necessitates adjustments be made regarding activities (e.g., children may not be able to be involved in as many extracurricular activities) and standards of living (families may have to move to smaller house or apartment). Often, the custodial parent may have to get, change or take on extra jobs which necessitates more time spent away from children. Even if the divorce or other family composition change (e.g., the death of a parent) occurred several years before, custodial parents and children may have to adjust to changing family roles and relationships when and if a serious dating partner is introduced into the family. There is a multitude of possibilities for how these dating relationships may develop and how they may affect the children within single-parent households. For example, some parents may become romantically involved with only one or a
few partners before remarrying, while other parents may have intimate short-term relationships with many different partners. These dating partners may or may not play a significant role in the lives of these children of divorce. Cohabiting partners are likely to have a major impact on the family process while noncohabiting dating partners are more likely to have less, little or no influence on the family's interactions.

Within recent years, researchers have examined the duration of courtship before remarriage (O'Flaherty & Eells, 1988), patterns of courtship of remarriage (Montgomery et al., 1992), and how extended households (having another adult live in single-parent home) (Dornbusch, Carlsmith, Bushwall, Ritter, Leiderman, Hastorf & Gross, 1985) affects the children and child-related behaviors. It should be noted that these studies (Montgomery et al., 1992; O'Flaherty & Eells, 1988) investigated dating behaviors in a retrospective fashion, as respondents had already remarried. No study has examined current dating patterns of divorced individuals in relationship to child behavior variables.

Regarding the duration and type of courtship, results indicate that 80% of women dated their future spouses for a year or less before beginning cohabitation, while 38% of women only waited 3 months before cohabitation began (Montgomery et al., 1992). It seems likely that the presence of children could affect the time of courtship
before marriage in several ways. The presence of children might increase the time period before remarriage, while shortening the time period before cohabitation. For example, in addition to deliberating about the partner qualities of the prospective spouse, a divorced parent would also have to consider how his or her children would get along with the prospective partner. Thus, a divorced parent may decide to live with a romantic partner and delay getting married to insure that his or her children got along with the dating partner. Further, the dating partner may have reservations about getting married to someone with children. The idea of a "package deal" may cause some potential partners to hesitate committing fully to marriage. This hesitation may lengthen the courtship duration before marriage and may result in more frequent cohabiting relationships. Montgomery et al., (1992) found that full cohabitation (partners combined possessions into a single home) was reported by 78% of their remarried sample, while only 9% of the sample did not live with their courting partner at least several days a week prior to remarriage. The presence of children may break up some dating relationships before marriage is considered. This is likely to be especially true when the children have externalizing behavior problems, as the dating partner may fear negative interactions with the child and may have different ideas about parenting practices which lead to relationship
discord. Therefore, within a population of ADHD children, more serious (i.e., cohabiting) dating relationships that do not lead to marriage might be expected than in mother-headed households with no ADHD children.

There is also evidence that the timing of courtship after separation may affect how well a child adjusts to a new stepparent figure. Montgomery et al. (1992) found that in the first months after remarriage, children whose mothers had moved relatively quickly into a new relationship evidenced more social competence and directed less negative behavior toward the custodial mother than children whose mothers began a later courtship. Further, children also showed higher levels of social competence and fewer acting out behaviors when their mothers cohabited prior to remarriage as compared to mothers who did not cohabit prior to remarriage. Taken together these findings suggest that the longer the time period spent in a single-parent home, the more difficult the adjustment between the child and a new stepparent. Additionally, the longer the time spent in a divorced household, the lower were the levels of the child’s social competence in the initial months following divorce. Hence, it may be less disruptive for a child to move into a remarried household relatively quickly following divorce instead of adjusting to a single-parent household (without another person living in the home) and then having to readjust to a new family reorganization. Therefore,
children may adjust quickly to new cohabiting partners if they are accustomed to this family structure (i.e., mother has lived with a man the majority of the time).

However, interpretation of these results should be made with caution since the study (Montgomery et al., 1992) dealt with children’s competence, behaviors, and their relationship with a stepfather only after the remarriage. It is not clear how children adjust to cohabiting partners (either partial or full) who may fulfill part or all of a stepparent role, but do not marry the mother. It seems likely that a child may benefit from having an additional parent or partial parent available, but this benefit may be diminished if the identity of the substitute parent changes often (i.e., mother is involved in a series of short-term cohabiting relationships) and the quality of substitute parenting varies and is provided by an individual who likely has less investment in the relationship. Further, a child who is exposed repeatedly to a parent’s discordant relationships (i.e., marital, dating) may become highly sensitive to adult conflict and may be particularly susceptible to internalizing psychological problems (e.g., anxiety, depression). Therefore, it is likely that children exposed to overt hostility between parents or parental substitutes would be more likely to manifest symptoms of depression.
However, there is some evidence that the presence of another adult in the home is associated with positive behaviors in the children of that home. Dornbusch et al. (1985) found that the presence of an additional adult (e.g., lover, grandparent, friend) was associated with a lower rate of adolescent deviance. Thus, a cohabiting partner may have a positive influence on the family. One possible explanation for how a cohabiting partner may positively impact the single-parent household is through support provided to the single-parent. Parents who feel supported and understood, regardless of marital status, are likely to be happier, have higher self- and parenting-esteem. Parenting skills may also be improved because the parent has someone to share parenting responsibilities and perhaps talk to about parenting problems. Thus, it seems likely that parenting skills may be an important variable to be considered when examining children from divorced families with behavioral problems.

Parenting Skills

Parenting skill is a complex construct which is central to child development and child psychopathology. Many researchers now assert that parenting skills may be a critical factor in determining how children adapt after parental separation (Emery, 1982; Fauber, Forehand, Thomas, Wierson, 1990; Forehand, Thomas, Wierson, Brody & Fauber, 1987). Parenting skills have also been found to be a
powerful predictor of delinquency in children (Patterson, 1992). In her review of the delinquency literature, McCord (1978), found that divorce by itself accounted for a small amount of the variance in delinquent behavior, but divorce and poor parenting practices combined showed a significant relationship to child delinquent behaviors. Thus, it seems important to examine parenting practices as well as the quality of the marital or nonmarital relationship in relation to child behavioral variables.

Among developmental psychologists there is wide acceptance of the notion that parental firm control, when coupled with parental warmth, promotes effective socialization within children (Lewis, 1981). Effective socialization in children includes such qualities as social responsibility, self-control, independence, and high self-esteem. Additionally, reviewers of empirical studies have typically concluded that parents of children who demonstrate antisocial behaviors (e.g., aggressiveness) tend to practice harsh and inconsistent discipline, show little positive involvement with the child, and demonstrate poor monitoring and supervisory skills (Patterson, 1992). While, it appears that parenting behaviors and skills directly affect the behavior of the child, researchers have disagreed about the definition of parenting skills and the underlying parenting dimensions responsible for differentiating effective from ineffective parenting.
Darling and Steinberg (1993) define parenting style as a "constellation of attitudes toward the child that are communicated to the child and that, taken together, create an emotional climate in which the parent's behaviors are expressed" (p. 547). Parenting behaviors include goal-directed parenting practices (e.g., requests, demands) and non-goal directed parental behaviors (e.g., gestures, changes in tone of voice). Researchers have found different dimensions to describe parenting style in early empirical research on socialization. These dimensions include: Love/Hostility and Autonomy/Control (Schafer, 1965); Warmth/Hostility and Restrictiveness/Permissiveness (Becker, 1964). Baumrind (1971) operationalized parenting style with Control as a single broad parenting dimension.

Baumrind (1971) distinguished among three qualitatively different types of parental control: Permissive, Authoritarian, and Authoritative. Authoritarian parents are likely to: attempt to control the behavior and attitudes of their children in accordance with an absolute set of standards; value obedience, respect authority, value the work tradition and preservation of order; discourage verbal give and take. Permissive parents are likely to: attempt to behave in an accepting, positive way toward the child's impulses, desires, and actions; use little punishment; consult the child; make few demands for household responsibility or order; allow the child to regulate his or
her own activities as much as possible and avoid the
eexercise of control; attempt to use reasoning but not overt
power to achieve objectives. Authoritative parents are
likely to: attempt to direct the child in a rational,
issue-oriented manner; encourage verbal give and take;
explain the reasons behind demands and discipline but also
use power when necessary; expect the child to conform to
adult requirements but also to be independent and self-
directing; recognize the rights of both adults and children;
set standards and enforce them firmly. These parents do not
regard themselves as infallible but also did not base
decisions primarily on the child’s desires (Macoby, 1980).

Baumrind’s (1971) research has found that authoritative
parents (i.e., parents whose parenting style includes both
warmth and control) have children who are more competent,
self-reliant and nonaggressive than children whose parents
are either authoritarian or permissive. These findings
coincide with Lewis’ (1981) findings that parental firm
control, when coupled with parental warmth, promotes
effective socialization within children. Authoritative
parenting techniques including control have been found to
deter problem behaviors, while parental responsiveness has
been associated with self-esteem, mental health, autonomy
and gregariousness (Baumrind, 1991). However,
responsiveness has not been found to deter externalizing
behaviors. Thus, it appears that a mixture of firm control
and appropriate emotional support provides the most effective parenting style. In addition to control and support, a parent’s awareness of a child or adolescent’s lifestyle, friends and school life has been found to be an even greater deterrent than restrictive control on the manifestation of externalizing behaviors (Baumrind, 1991). However, monitoring has been found to have an effect with preadolescent and adolescents, but is not related to the manifestation of externalizing disorders in younger boys (Banks, Forgatch, Patterson, & Fetrow, 1993).

Parenting style has been divided into two subconstructs, parental control and parental support (Rollins & Thomas, 1979; Slater & Power, 1987). Baumrind (1991) labelled two variables: parental demandingness and parental responsiveness. Parental control or demandingness refers to the type or degree of intensity of influence attempts (discipline) used by parents to try to direct the behavior of the child in a manner desirable to the parents (Rollins & Thomas, 1979). Parental support or responsiveness encompasses the variables of acceptance, nurturance and sensitivity and can be defined as behavior exhibited by a parent toward a child that makes the child feel comfortable and accepted (Slater & Power, 1987).

While much has been written in theory about the processes through which parenting style may affect child development, there is a very limited empirical
substantiation about the conditions under which the same parenting style may differentially affect children’s development (Darling & Steinberg, 1993). For example, authoritarian parenting, which is associated with fearful, timid behavior and behavioral compliance among their sample of European-American boys and girls, was associated with assertiveness among their sample of African-American girls. Therefore, it seems important to extend the theoretical tenets to various populations to determine how parenting styles affect a child’s development.

**Parenting Skills and Relationship Quality**

Research indicates that marital status is related to parenting behaviors. Compared to parents from intact families, divorced parents have been found to: engage in less effective discipline techniques (e.g., nattering, use of threats, yelling) (Banks, Forgatch, Patterson, & Fetrow, 1993); be more punitive (Hetherington, et al., 1982; Wallerstein & Kelly, 1980); issue more negative commands; use a more dominating and hostile style of control (Zelkowitz, 1982); and be more inconsistent in their parenting techniques (King & Fullard, 1982). Divorced parents have been found to have poorer problem solving skills, have less positive communication and engage in more conflict with their children compared to parents from intact families (Forehand, Thomas, Wierson, & Brody, 1990). In addition, divorced parents have been found to be less
affectionate and show less involvement with their children (Hetherington, Cox, & Cox, 1982). In a non-clinic sample of divorced mothers, single parenting skills accounted for 21% of variance in parent-reported externalized behavior pathology (Walsh & Stolberg, 1989). While these findings suggest that marital status directly affects one's ability to use effective parenting skills, an alternative explanation is that single-parent families engage in poorer parenting practices, due to a lack of parenting support. Dornbush et al's (1985) findings that the presence of an additional adult (e.g., lover, grandparent, friend) is associated with a lower rate of adolescent deviance suggests that a supportive cohabiting or dating partner may mitigate some of the negative parenting practices if they provide relationship and parenting support.

If relationship and parenting support are related to the use of effective parenting techniques, marital conflict should be associated with the use of poor parenting skills. Research indicates that marital conflict has been associated with inconsistent parenting, and the use of increased punitiveness, decreased reasoning, as well as with increased parental criticisms, commands and physically negative behaviors, and with increased child conduct problems (Jouriles, Pfiffner, & O'Leary, 1988; Webster-Stratton, 1989). Shaw, Emery and Tuer (1993) found that parental conflict was associated with poor adjustment in children.
This study examined parenting practices prospectively and found that to-be-divorced parents showed significantly less concern, and higher levels of rejection, economic stress, and parental conflict prior to divorce than always-married parents. Hence, it appears that poorer parenting skills including use of: negative sanctions, less positive parental support, and less attendance to son's needs, which have been found to have detrimental effects on boys after divorce, are likely to go on before the divorce (Hetherington, 1981).

It seems likely that conflict between parents or parental figures can lead to the use of ineffective parenting techniques which can then lead to externalizing behaviors in children. The development of externalizing symptoms is associated with relationship (marital or nonmarital) conflict and marital separation through the possible mediating factor of reduced parenting skills. Support for this theory is also evidenced in Miller et al's. (1993) path analysis showing that lower maternal depression correlates with positive affect toward spouses. In turn, the more positive affect displayed in the couple relationship the more warmth exhibited in parenting. This parental warmth is in turn associated with less acting-out behavior by a child. Thus, it seems likely that single mothers, who may be depressed due to sole responsibility of the child may display less positive affect toward their
partner and less warmth in parenting. The end result is likely to be the exacerbation of acting out behaviors. In contrast, if the nonmarital relationship is characterized by warmth, it is likely that the child in that single-parent home may exhibit fewer externalizing behaviors. Further, support for the possibility that parenting plays an important mediating role was found by Fauber, Forehand, Thomas and Wierson (1990). Their model found no direct path between conflict and externalizing problems in either the divorced sample or the sample of families in which the parents had remained married.

In recent years there have been conflicting conclusions about the relationship between maternal reports of their own depression and their children's behavior. Miller et al. (1993) found that maternal depression led to conflict between the parents which then led to externalizing behavior in the child. However, others (Hops, Biglan, Sherman, Arthur, Friedman & Osteen, 1987; Johnston & Pelham, 1990; Rickard, Forehand, Wells, Griest, & McMahon; 1981) have reported that depressed mothers have less deviant children than non-depressed mothers and that depressed mothers' behaviors actually suppressed or reduced children's aggressive behaviors. It is possible that a depressed or irritable maternal mood acts as a discriminative stimulus for child compliance by signaling that misbehavior would be punished (Johnston & Pelham, 1990).
Maternal depression has also been found to affect maternal reports of child behavior. Fergusson, Lynskey, and Horwood (1993) employed a series of structural equation models of the relationships between maternal depression and errors in maternal reports of child behavior. Their results suggested that depressed women show a tendency to report greater problem behaviors in their children. The authors surmise that maternal depression can distort maternal reporting behaviors so that depressed women overreport problems. Alternatively, these authors also suggest that it is possible that the children of depressed women show high rates of problem behaviors at home and these behaviors are accurately reported but are not reported by teachers and children.

While the relationship between maternal depression and child externalizing behaviors is not clear, the relationship between depressed mood and parenting behavior indicates that maternal depression can negatively impact parenting behaviors. Research has found that depressed mothers were more critical (Webster-Stratton & Hammond, 1988) and issued more commands to control their children compared to nondepressed mothers (Forehand, Lautenschlager, Faust, & Graziano, 1986). However, others have found no relationship between maternal depression and maternal controlling behaviors (Brody & Forehand, 1986).
In a study comparing clinical with nonclinical stepfamilies, marital relations were not related to behavioral problems in the clinical families (Bray, 1992). The author hypothesized that marital relationships in stepfather families operate relatively independent of parent-child relationships because of the complex nature of the alliances and loyalties in stepfamilies. Perhaps the presence of another parental figure in the home provides parenting support (e.g., helps take care of the children, provides more economic support) even when relationship support is not strong. Therefore, it seems important to look at relationship support as well as support in the parenting domain.

Parenting Skills and Externalizing Disorders.

There is evidence that the social interaction between children with externalizing disorders and their parents is impaired. Research indicates that these children are less compliant with parental requests, more off-task and negative, and typically more demanding of help and attention than are normal children (Barkley & Cunningham, 1980; Befera & Barkley, 1985; Mash & Johnston, 1983). Parents of children with ADHD engage in more negative, critical and controlling discipline techniques compared to parents of normal children (Befera & Barkley, 1985; Campbell, 1979) and are less involved with their children (Battle & Lacy, 1972). However, it is not clear whether parents using these
techniques have children with ADHD or ADHD combined with one of the conduct disorders. Schachar and Wachsmuth’s (1991) findings suggest that parent-child interactions between children with only ADHD and their parents may not be disturbed compared to parents and children with a conduct disorder or a combination of the three externalizing disorders. Thus, it was anticipated that the use of effective parenting techniques would more likely be used by parents of children with ADHD only compared to the mixed groups.

Rationale and Hypotheses

This study was designed to explore the relationship between the quality of intimate heterosexual relationships, parenting style, and externalizing and internalizing behavior problems of children with ADHD and conduct disorders. One goal was to examine how family dysfunction may contribute to the manifestation of externalizing symptoms in children. Several hypotheses were developed based on the above cited research.

One conclusion drawn from previous research was that the development of aggressive behaviors in children associated with conduct disorders would be associated with environmental variables like family dysfunction (Schachar & Wachsmuth, 1991) and high family conflict. Therefore:

Hypothesis 1. The amount of child aggressiveness and delinquency was expected to be positively associated with
the amount of overt conflict expressed between parents or parental substitutes in front of the child.

It was anticipated that the more serious the intimate relationship (e.g., full cohabiting vs. partially cohabiting, vs. dating) the greater effect on the child. In other words, if the mother was not living with her partner, the child may not have been as adversely affected by overt conflict. Therefore:

**Hypothesis 2.** The amount of child aggressiveness and delinquency was expected to be a function of the interaction of the seriousness of mother’s intimate adult relationship and the overt hostility exhibited between the mother and this partner.

It was expected that a positive association between the amount of externalizing symptoms and being single would exist. This hypothesis was based on the speculation that parents with children might have been slow to remarry because of their own concerns about the partner’s parenting and the future partner’s concern and trepidation about becoming a parent to a difficult child. Therefore:

**Hypothesis 3.** The mothers’ single marital status was expected to be positively associated with the amount of aggressiveness and delinquency exhibited by the child.

Based upon the divorce literature (Wallerstein & Kelly, 1980), it seemed probable that a child exposed repeatedly to a parent’s discordant relationships (i.e., marital, dating)
might have become highly sensitive to adult conflict and may have been particularly susceptible to internalizing psychological problems (e.g., anxiety, depression). Therefore, it seemed likely that children exposed to overt hostility between parents or parental substitutes would be more likely to manifest symptoms of depression. Therefore:

**Hypothesis 4.** Depression in children was expected to be positively associated with the amount of overt hostility expressed in front of the child.

The finding that divorced parents engage in less effective discipline techniques (e.g., Banks et al., 1993; Hetherington et al., 1982; Wallerstein, 1980) suggested that a lack of parental support may have been associated with ineffective parenting. Conversely, support received by the parent was likely to facilitate good parenting skills. Therefore:

**Hypothesis 5.** Relationship and parenting support were expected to be positively associated with the use of warm and responsive parenting behaviors.

Skillful parenting practices were likely to guard against the development of externalizing disorders, especially aggressiveness and delinquency. Therefore:

**Hypothesis 6.** Warm, responsive and consistent parenting skills were expected to be associated with less aggressiveness and delinquency in children.
If relationship and parenting support are positively associated with strong parenting behaviors, it seemed likely that relationship support provided to the mother would be associated with positive child behaviors. Therefore:

**Hypothesis 7.** Relationship and parenting support was expected to be associated with fewer externalizing behaviors.

Dornbush et al.'s (1985) findings that the presence of an additional adult in the home was associated with a lower rate of adolescent deviancy suggested that a supportive cohabiting or dating partner may have mitigated some of the negative parenting practices associated with single-parenthood. Therefore:

**Hypothesis 8.** Among single-parent families, the presence of a cohabiting partner was expected to be associated with fewer externalizing behaviors in children.

The association between maternal depression and maternal reporting of child misbehavior (Fergusson et al., 1993) suggests that depressed women are likely to overreport problem behaviors in their children. Therefore:

**Hypothesis 9.** The endorsement of maternal depressive symptoms was expected to be positively associated with the mothers' reports of externalizing behaviors.
CHAPTER II

METHOD

Sample

Subjects included 102 mothers of boys who received services at the Fort Worth Child Study Center (CSC) for externalizing behavior problems. These children exhibited behaviors which were consistent with a diagnosis of Attention-deficit Hyperactivity Disorder. Many of these children also exhibited many symptoms consistent with the conduct disorders. A therapist verified that English was the primary language for all participants. The age constraints of the study were specified as 4 to 15 for all measures other than the Children's Depression Inventory (CDI) (Kovacs, 1981). The age range for the CDI is 7 to 17 due to the necessary reading abilities (Kovacs, 1981). However, since a maternal measure of depression was also obtained and only a portion of the sample needed to complete the CDI, it was determined that 4 to 6-year olds were also appropriate for this study, as many children this age already exhibit symptoms of ADHD (DuPaul, Guevremont, & Barkley, 1994). No specific constraints regarding marital status were posited as a wide range of marital status and relationship support was expected and needed to test the hypotheses.
Only male children were used in this study due to the higher prevalence of males who manifest externalizing symptoms (American Psychiatric Association, 1994; Barkley, 1990). Further, possible sex differences in features and symptoms of externalizing disorders also supported using only male children. Similarly, because little is understood about differences between maternal and paternal perceptions of children with externalizing disorders (Krauss, 1993; Webster-Stratton, 1989) as well as the increased availability of mothers, only mothers were asked to participate in this study. Limiting the sample to only boys exhibiting externalizing behaviors and their mothers also served to reduce error variance.

**Materials**

The measures used in this research contained a number of self-report questionnaires which included scales to measure: mother’s sense of parenting skills, frequency of hostility between parents or parental substitutes, child’s internalizing and externalizing symptomatology, mother’s perceived support from an intimate relationship, mother’s level of commitment to the intimate relationship and child’s level of depression.

**Child Behavior Checklist (CBCL).** Child psychopathology was measured by the CBCL (Achenbach, 1991). The CBCL is a multidimensional measure of psychopathology completed by the parent that samples a variety of behavioral and psychiatric
symptoms. The CBCL characterizes children’s behavior along several clinically relevant dimensions which vary with age and sex, including both broad classes of symptoms (e.g., internalizing and externalizing behavior) and narrow scales which are aggregated to form these broader internalizing and externalizing factors and which reflect more specific problem areas (e.g., depressed, obsessive-compulsive, hyperactive, aggressive). A three-point scale is used to rate items (0 = not true, 1 = somewhat or sometimes true, 2 = very true or often true). The CBCL developed for boys between the ages of 4 and 18 contains 113 items as well as a separate section to assess child academic and social competencies. CBCL items sum to yield t-scores (mean = 50; SD = 10) for the broad band dimensions of externalizing and internalizing behavior problems. The CBCL has good reliability and validity and discriminates adequately between clinic-referred and nonclinic children. Cornbach alphas range from .62 to .92 for individual scales with a sample of referred and nonreferred (to a mental health clinic) boys ages 4 to 11 (Achenbach, 1991). Test-retest correlations from two ratings by the same informants often range from .80 to .90. Inter-rater correlations have been found to be adequate (κ = .59) for two parents who see the child at home (Achenbach & Edelbrock, 1983). However, agreements are lower between raters who observe children in distinctly different situations (e.g., κ = .24 between

**Parenting Dimensions Inventory (PDI).** The PDI (Slater, 1986) is a multidimensional 200-item self-report inventory of parenting attitudes and behavior (see Appendix B). The PDI contains nine scales: Nurturance, Sensitivity, Nonrestrictive Attitude, Type of Control, Amount of Control, Maturity Demands, Involvement, Consistency, and Organization. For purposes of this study, the Involvement scale was omitted. This scale was omitted because of its ambiguous phrasing (e.g., help child care for clothes). Approximately half of the PDI items were drawn from previously existing instruments.

The modified PDI has five major sections. Sections I and III consist of statements from which parents choose the appropriate response on 6-point Likert type scales. Section II consists of pairs of statements for which parents choose the statement that best reflects their attitude. Section IV consists of chores for which parents indicate the number of chores their child is held responsible. Section V presents brief descriptions of hypothetical misbehaviors by the child and requires parents to rate how likely they are to engage in various discipline (control) strategies.

**O'Leary-Porter Scale of Overt Marital Hostility (OPS).** The OPS is a 10-item measure which taps the frequency of occurrence of various forms of marital hostility which the
subject rates on a five-point frequency scale (See Appendix C). Higher scores indicate greater hostility, sarcasm, and physical abuse. Test-retest correlations of .96 are reported (Porter & O’Leary, 1980). The correlation of the OPS with the Short Marital Adjustment Test, shown to discriminate distressed and non-distressed marriages, was .63 (Porter & O’Leary, 1980). Scores on the OPS have been shown to predict child deviance as assessed by Quay and Peterson’s Behavior Problem Checklist (Porter & O’Leary, 1980). The wording of this scale was modified so that it could be completed by single mothers involved in nonmarital intimate heterosexual relationships. This modified scale is in Appendix C.

Children’s Depression Inventory (CDI). The CDI (Kovacs, 1981) is designed for school-aged children and adolescents. It requires the lowest reading level of any measure of depression for children (Berndt, Schwartz, & Kaiser, 1983). The instrument quantifies a range of depressive symptoms including disturbed mood, hedonic capacity, vegetative functions, self-evaluation, and interpersonal behaviors. Several items concern the consequences of depression in contexts that are specifically relevant to children (e.g., school). The scale was found to be suitable for youngsters aged 7 to 17 years.

The measure includes 27 items to assess affective, cognitive, and behavioral symptoms. For each item, one of
three sentences (0 to 2 point scale) is endorsed that best describes the child over the past two weeks. Weiss and Weisz (1988) reported Alpha internal coefficients of .81 to .89 for a sample of clinic-referred youths.

**Hopkins Symptom Checklist (HSCL).** The HSCL (Derogatis, Lipman, Rickels, Uhlenhuth, & Covi, 1974) is a 58 item self-report measure asking for reports of symptoms for the past month (See Appendix D). This measure has been shown to have high reliability and validity (Derogatis, et al., 1974) and to be sensitive to low levels of distress in the general population (Uhlenhuth, Lipman, Balter, & Stern, 1974).

**Involvement Scale.** This 21-item scale was designed for use with this study to assess the seriousness of the dating or marital relationship between the mother and partner (See Appendix E). The scale was designed so that it could be completed by single or married women. The scale asked the subjects yes or no questions (e.g., Are you currently in a dating or marital relationship?) as well as specific questions about the amount of time spent in the home (e.g., On average, how many nights a week does this person spend in your home?). The scale items were arranged in order of increasing seriousness. The first item "not being in dating or marital relationship" defined the single mother without any intimate heterosexual involvement. Questions progressively tested how involved the woman was with her partner. Mothers who responded yes to the last question had
plans to marry the dating partner or were already married. Women who answered affirmatively to this question were assumed to be very committed to the person.

**Demographic Information.** Upon consent from the parent, information regarding the parent’s age, employment, income, marital status, and number and ages of all children was obtained from the chart. This information was obtained by the CSC patient coordinator upon referral to the Center. Similarly, information regarding the child’s age, gender, ethnicity, grade and diagnoses was also be obtained.

**Procedures**

The CSC is sponsored by the United Way agency and private donations to provide services to children up to age 15. Referrals include children who have physical, developmental and psychological disorders. The CSC provides the following services: audiological, speech therapy, occupational therapy, physical therapy, educational testing, psychological assessment and therapy, pediatric examinations, psychiatric evaluations, dental care, and genetic counseling. Due to the nature of their difficulties, children manifesting symptoms associated with externalizing disorders are most often referred to psychological and pediatric services for evaluation and treatment. In 1992 the CSC served 4020 children. The Psychological Services Clinic evaluated 1190 of those children. Of the children seen by Psychological Services,
approximately 75% are diagnosed with an externalizing disorder. Upon completion of the questionnaires, the diagnoses of an externalizing disorder was confirmed through documentation in the chart by a licensed psychologist and/or pediatrician.

Mothers were recruited when they brought their children in for initial evaluations. Mothers who were at the CSC for medication follow-ups or other services (e.g., Parent Education Groups, Social Skills Groups for boys) were also asked to participate. Some mothers were excluded from participation due to the Center’s initial assessment that the family was under an inordinate amount of stress and would therefore be tested using a Rapid Intake Assessment (RIA) format. When families are tested using this format, mothers and sons are tested and given feedback in the same morning, therefore limiting the amount of time the mother has to complete questionnaires.

Questionnaires were completed by the child at the time of initial evaluation to ensure that a licensed psychologist or professional counselor administered the CDI. If a psychologist or counselor was not available to administer the CDI to the child or if mother’s data was collected at a follow-up group without the child being present, the mothers’ report of depression from the Depression Scale on the CBCL was used. Correlations and a matched pair t-test were conducted on the CDI measures completed and the matched
Depression Scale of the CBCL to insure that an accurate assessment of depression was made using only the parental report of child depression. Research appears mixed regarding the use of parental report to assess depression in children. Kazdin (1989) asserted that commonly used methods of selecting depressed children (i.e., child and parent report) are likely to yield different results which can lead to different conclusions about the correlates of depression. Hence, parents of depressed children may overreport external behavioral symptoms and underreport the more subjective symptoms of depression (Angold, 1988). However, more recently, Rey and Morris-Yates (1992) found that the parental report scale of the Child Behavior Checklist (Achenbach & Edelbrock, 1983) was able to identify depressed subjects. Rey and Morris-Yates (1992) concluded that specific depression self-report rating scales may be unnecessary if parental report on the Child Behavior Checklist is available. These findings seemed somewhat contradictory and suggested that obtaining information from both the child and parent is preferred. Obtaining both child and parent reports when practical assured that objective and subjective symptoms of depression were evaluated.

Prior to beginning data collection an approval was obtained from the University of North Texas Committee for the Protection of Human Subjects in order to ensure that the
procedures and materials used in this study were reasonable. These procedures were also in accordance with the Guidelines for Human Research set forth by the American Psychological Association (1991) and the Ethical Principles of Psychology (American Psychological Association, 1992). Approval was also obtained from a committee at the Child Study Center to ensure that the procedures and materials used were in accordance with CSC policies and procedures.

The mothers were recruited by the psychologists, pediatricians and counselors. Mothers were asked if they were interested in participating in the study. Mothers were asked to sign a consent form for their children and themselves. This consent informed them about the nature of the study, the time required for their participation, the confidentiality of their responses and identity, and their right to withdraw from the study at any point without penalty. Guidelines from the APA Ethical Principles and the UNT Committee for the Protection of Human Subjects were followed. All participants were provided with a copy of the informed consent (Appendix A), and will receive feedback regarding the results of the entire study if they elected to do so. The subjects were told that the study focused on obtaining information about characteristics of mothers with ADHD children and these children. Mothers were also informed that they would be asked to complete self-report questionnaires about themselves, their children and their
relationship with their partner or partners, whether married or single and that information from their children’s CSC record would be recorded. In addition, they were informed that all identifying information would remain confidential and their responses would be recorded in a manner that would not identify them or their children. In order to maintain anonymity, but keep track of participants so that demographic data could be collected from chart records, all participants were assigned a separate packet number. Once completed, the informed consents with packet number were kept separate from questionnaires. Names were not used when integrating and analyzing the data. There was a master list containing a participants number and name, however, this list was kept with the informed consents in a file in a locked room separate from all completed packets.

Psychologists or counselors asked the child to complete the CDI. The psychologists and counselors inspected the completed instrument to insure that further assessment of depressive symptoms was not warranted. If there were indications that the child was depressed the therapist took further action if deemed clinically necessary.
CHAPTER III

RESULTS

Table 1 shows the means, standard deviations and ranges and Table 2 shows the characteristics of the participants. As was expected, based on the Child Study Center’s sliding scale pay structure which accommodates families with relatively low income levels, the majority of participants (61.8%) earned income of less than $30,000 annually, with 20.6% of participants making less than $10,000. The mothers in the study ranged in age from 25 to 53 years (M = 35.15). Most had completed at least 12 years of education (M = 13.06, SD = 2.21). Among the 67 mothers who worked outside the home, 46 were working on a full-time basis. Although the sample was predominantly Caucasian (80%), the sample did include minority subjects, primarily from African American origins (11%). Other minorities represented in this sample included: Hispanic mothers (6%), and Native American mothers (3%). Minorities were somewhat underrepresented when compared with the population served by the Child Study Center in 1994 (58% Caucasian, 20.7% African American, 19.5% Hispanic, .8% Asian, .9% Native American and Middle Eastern) (Fickling, personal communication, 1995). One reason for the low representation of Hispanic participants is due to
the language barrier; some Hispanic mothers were not fluent in English, and therefore, were unable to complete the questionnaire written in English. The response rate for this study was somewhat low, 46%. This 46% does not include mothers and sons who were assessed using the Rapid Intake Assessment method, as they were specifically excluded from the study. This low response rate may be due to the many responsibilities carried by these women, and due to the one hour time commitment required to complete the questionnaire.

While over half (56%) of the study were married and 31% were divorced or separated at the time of the study, 11% indicated that they had never been married. These findings are consistent with recent trends which suggest that many children are being raised from birth by mothers who will be the sole financial and emotional providers for their children. The average length of time married was 11.68 years (SD = 6.14) for those married.

The average age of the identified child was 8.59 years (SD = 2.46). Sixty-nine of the 100 boys had at least one sibling living in the home with them. The average number of children living in the home was 2.03. Mothers were the predominant caregiver, as 18 (17.6%) of mothers reported that they had no other assistance with child care. Of the remaining 82 mothers, all reported that they were responsible for at least 20% of child care duties. These mothers, on average were responsible for 64.28% of child care
care duties, with husbands or boyfriends being responsible for some portion (\(\bar{x} = 24.23\%\), Range = 0 to 70\%) of child care responsibilities. Hence, mothers in this sample represent the major caregiver for the children in this sample followed by husbands and/or boyfriends.

Prior to analysis of hypotheses, the factor structure and reliability of the Involvement Scale (Guarnaccia & Walker, 1995) was derived. Three factors were found and named: "Time Spent as a Parental Figure," "Ideas on Parenting," and "Commitment/Satisfaction with Relationship." Items on each of these factors and reliability coefficients for each factor are presented in Table 3.

The means, standard deviations, and reliability coefficients for the 22 scales are shown in Table 4. Also shown are the clinical cutoff scores for relevant scales. High to moderate internal consistency was found for the majority of scales using Cronbach's coefficient alpha. However, four scales on the Parenting Dimensions Inventory (Amount of Control, Responsiveness to Child, Maturity Demands and Nonrestrictive Attitude) were found to have poor to low reliability. It is noteworthy that a floor effect was found for many of the criterion variables (e.g., the amount of aggressiveness and delinquency exhibited by the children). Hence, relatively few of the boys in this sample exhibit behaviors which would warrant a diagnosis of a conduct disorder. Similarly, some predictor variables (the
amount of overt conflict expressed between the parents or parental substitutes) were also found to be unexpectedly low. Earlier studies (Emery & O'Leary, 1984), using the same measure employed in this study, found scores somewhat higher ($x = 37$) when examining a sample of community (nonclinical) parents.

Demographics were entered into the equation of prediction first forcing the psychological constructs to be tested for their contribution above and beyond these demographics. There was only one demographic variable related to criterion variables. Specifically, the number of children living in the home was related ($r = .22, n = 100, p < .03$) with the amount of delinquency exhibited by the son. A marginal relationship was found between marital status and aggressiveness ($r = .23, n = 100, p < .06$).

**Testing of Hypotheses**

The first hypothesis, the amount of child aggressiveness and delinquency would be positively associated with the amount of overt conflict expressed between parents or parental substitutes in front of the child was not supported (Aggressiveness $r = -.02, n = 90$) (Delinquency $r = .01, n = 90$). As Table 4 shows, there was a relatively low amount of conflict expressed by the adults in front of the child as well as relatively low amounts of delinquency and aggressiveness reported concerning their sons.
Hypothesis 2 was based on the premise that children who were exposed to hostility would be more negatively affected if the mother was involved in a serious relationship in which the partner was more involved with the child. Therefore, hypothesis 2 was stated as: the amount of child aggressiveness and delinquency would be associated with the serious involvement of the mother's relationship and the overt hostility exhibited between the mother and her partner. Multiple regression analyses were employed to test the hypothesis. Similar to Hypothesis 1, no support was found.

Regarding Hypothesis 3, the mothers' single marital status was expected to be positively associated with the amount of aggressiveness and delinquency exhibited by the child was partially supported. As predicted, the mother’s marital status was related to the amount of aggressiveness exhibited by the child. $R = .31$, $F(4, 95) = 2.51$, $p < .05$. Post hoc analysis found that significant differences existed between single and married mothers, and between single mothers and mothers who were widowed. There was not a significant difference between married and divorced mothers. In contrast to Hypothesis 3, no significant relationship was found for marital status and delinquency.

Prior to testing Hypothesis 4, a correlation was conducted in order to test the relationship between child depression reported by the mother on the CBCL and amount of
depression reported by the child. No significant relationship was found between the two measures ($r = -0.20$). However, it should be noted that the power for this test was low due to the small number of boys ($n = 26$) who completed the CDI. The mother’s report of son’s depression was used to test Hypothesis 4, that depression in children would be positively associated with the amount of overt hostility expressed in front of the child. However, tests of correlation found no support for this hypothesis ($r = 0.14$, $n = 90$, n.s.).

Regarding Hypothesis 5 which asserted that relationship and parenting support would be positively associated with the use of nurturing and responsive parenting behaviors, no overall support was found when support was measured using the entire Involvement Scale (Guarnaccia & Walker, 1995). However, when support was measured using separate factors, a significant positive relationship between Ideas on Parenting and Responsiveness to Child was found $r = 0.26$, ($n = 90$), $p < .01$. No significant relationships were found between nurturance and relationship support factors.

Regarding Hypothesis 6, that nurturing, responsive and consistent parenting skills would be associated with less aggressiveness and delinquency in children, partial support was found. Although the multiple regression analysis was not significant, marginally significant relationships were found between nurturance and delinquency ($r = -0.16$, $p <$
.09), responsiveness to the child and delinquency ($r = -.21$, $p < .03$), and responsiveness to the child and aggressiveness ($r = -.13$, $p < .09$). With less parental nurturance and responsiveness relating to more child delinquency and less parental responsiveness relating to more child aggressiveness.

Hypothesis 7 proposed that relationship and parenting support was expected to be associated with fewer externalizing behaviors. No support was found for this hypothesis using multiple correlational analyses. This finding is not surprising given the preceding results which suggest that the demonstration (proliferation) of externalizing symptoms is only marginally related to some specific parenting behaviors (e.g., nurturance and responsiveness).

Hypothesis 8 proposed that among single-parent families, the presence of a cohabiting partner was expected to be associated with fewer externalizing behaviors in children. Using a one-way ANOVA, a significant, but unexpected relationship was found, as there was a significant relationship between delinquency and the presence of a cohabiting partner ($R = .32$, $F(1,41) = 4.63$, $p < .05$). This finding is unexpected because, although significant, it is counter to what had been predicted. It had been hypothesized that this relationship would be negative, while present findings indicate that the presence
of a cohabiting partner among single, divorced or widowed mothers is associated with more delinquency in sons. No significant relationship was found between the presence of a cohabiting partner and the amount of aggression and depression in the child (as measured by the mother).

Hypothesis 9, stated that the endorsement of maternal depressive symptoms would be positively associated with the mothers’ reports of externalizing behaviors (aggressiveness and delinquency). Although no support was found for a relationship between maternal depression and child aggressiveness and delinquency, marginal support was found for the presence of a positive relationship between mother’s report of her depression and mother’s report of son’s attentional problems ($r = .17$, $n = 100$, $p < .09$).
CHAPTER IV

DISCUSSION

One of the overall objectives of this study was to contribute to the growing consensus that children with ADHD represent a heterogeneity of youngsters who share some problems and symptoms (e.g., impulsiveness, attentional difficulties), but may also demonstrate a diversity of problems, and may differ in the manifestation of symptoms. Specifically, although there is a high comorbidity between ADHD, and the conduct disorders (Oppositional Defiant Disorder and Conduct Disorder), there are many children who exhibit impulsiveness and attentional difficulties without displaying more antisocial behaviors associated with Conduct Disorder and Oppositional Defiant Disorder. Distinguishing between ADHD children with or without accompanying aggression or a conduct disorder is one way to help improve treatment directions by matching treatment modality with child symptoms (Hinshaw, 1987; Loney, 1987). Researchers (Whalen & Henker, 1991) have espoused the need to learn more about family factors, including parenting style and competence as well as marital conflict or parental psychopathology. The purpose of the present study was to try to learn more about ADHD boys, their tendency to exhibit
aggressive and hostile behaviors, and to explore possible correlations between these externalizing behaviors and their family functioning patterns.

The present investigation into the family functioning of boys exhibiting ADHD symptoms compliment results from earlier studies (Loney, 1987, Schachar & Wachsmuth, 1991). Current results confirm earlier studies (Schachar & Wachsmuth, 1991) which find that parent and child functioning (e.g., parental nurturance or responsiveness) is somewhat negatively related to the manifestation of aggressive and delinquent behaviors by sons. Present findings also support their findings, in that, disturbed family functioning was found even when socioeconomic class has been controlled. Hence, it seems likely that family factors may somewhat mediate the development of a conduct disorder among ADHD children.

It should be noted that present results are of a correlational nature. Therefore, it is not possible to determine if it is a lack of parental nurturance and responsiveness that mediates externalizing symptoms, or if perhaps, boys predisposed by genetics to act out make it difficult for parents to provide a nurturing and responsive environment.

In addition, the relative weakness of the findings also suggest that family function or dysfunction is not the primary mediator for the development of conduct disorders.
Perhaps, like ADHD, which is known to have a strong familial-genetic component (Biederman et al., 1990; Morrison, 1980; Stewart et al., 1980), the manifestation of a conduct disorder also has a genetic component which predisposes a child to act out against social norms. In this scenario, family functioning is a minor contributor to the manifestation of a conduct disorder, as the lack of positive family interactions (e.g., parental responsiveness, nurturance) may contribute to the further exacerbation of antisocial symptoms.

The unexpected finding that the presence of a cohabiting partner among non-married women was associated with more delinquency is counter to past research (Dornbusch et al., 1985) which found that the presence of an additional adult was associated with a lower rate of adolescent deviancy. Current results suggest the opposite, and taken with other findings in the present study, generate several different alternatives to explain these findings.

One possible explanation for the relationship between a cohabiting partner and delinquency demonstrated by a son, may be that children who have lived in single-parent homes for a long time, perhaps all their lives, may be resistant to authority figures other than their mother. As a result, boys may become less involved at home and more involved with peers and/or gangs who are prone to get in trouble as a way of rebelling against their mother’s relationship.
Other findings which may be related to the amount of delinquency exhibited by the son are the marginally significant findings that nurturance and responsiveness by the mother is negatively correlated with the amount of delinquency in the son. An additional related finding is that the number of children in the home is positively related to the amount of delinquency exhibited by the son. Taken together, these findings suggest that mothers, especially single mothers who may have never had support from the biological father, may not be able to provide adequate nurturance and responsiveness required to keep their children from being negatively influenced by external peer relationships. This problem is likely to be exacerbated if the mother has more than one child requiring large amounts of time and attention. Therefore, when the mother becomes involved with a man, she may even have less time and attention (i.e., nurturance and responsiveness) to devote to them, as the adult relationship takes time and attention away from the children. The presence of children exhibiting externalizing problems may prevent remarriage, as the dating partner may fear negative interactions with the child. The fact that the adults do not marry may prevent the partner from having a positive effect on the behaviors of the son. However, the small effect size indicates that the dynamic relationships just described are tenuous and
prevent definitive statements from being made regarding the presence of a cohabiting partner in single-mother homes.

Several limitations of this study should be mentioned. Overall, this sample of boys when rated by their mothers did not exhibit significant amounts of aggressiveness or hostility. Therefore results should be interpreted with caution. This lack of symptomatology may be due to the fact that the boys' attentional problems were indeed the sole reason for applying for services at the CSC. Attentional difficulties alone often warrant negative attention from schools and parents, and is certainly sufficient to justify psychosocial interventions. While past research indicates a strong overlap exists between attentional problems and conduct disorders (Stewart et al, 1981), some independence has been found (Schachar & Wachsmuth, 1991). Thus in retrospect, there may have not been basis to expect a proliferation of conduct disorder symptoms (lying, stealing, cheating, destroying property) associated with aggressiveness and delinquency scales used in this study.

A related and unexpected finding was that the boys in this sample, referred for attentional problems, were only assessed as being slightly above the cutoff for attention problems on the attentional measure. This raises several important questions regarding this sample. One possible explanation for this finding may be that parents and schools have become more sensitive to attentional problems, and
therefore, more children with minimal symptoms are being assessed for attentional problems. Perhaps parents, teachers and clinicians are oversensitive to ADHD at this time, given the high attention the disorder has received in recent years. This reaffirms the need for careful assessment by several different sources (e.g., teachers, parents, clinicians). Another possible reason for the floor effects found in the present sample may be due to selection bias, as mothers who responded were more likely to have sons with less severe symptoms, as they may not feel as overwhelmed as mothers whose sons exhibit severe attentional difficulties.

Another limitation is the floor effect which was found for the amount of hostility exhibited by the parents and parental substitute in front of the child. Mothers in the present sample reported a mean of 22.9 on a scale that ranges from a low of 10 to a high of 50. When compared with earlier studies (Emery & O’Leary, 1984) using the same measure, this sample exhibits a small amount of hostility. While past research has found moderate to strong associations between marital discord and child behavior problems in samples of children referred for psychological intervention (Emery & O’Leary, 1982; Porter & O’Leary, 1980), these findings were not replicated in the present study. The present findings are more similar to Emery and O’Leary’s 1984 study with a nonclinic referred sample.
Similar to present results, the correlation between the amount of overt conflict expressed in front of the child and the mother's rating of conduct disorder observed in the child was not significant. Perhaps mothers in the present study underestimated the level of openly expressed marital conflict due to social desirability needs or their preoccupation with the problems of the child.

However, for whatever reason, mothers in the present study reported little hostility between their partner and also reported relatively low amounts of externalizing behaviors. Therefore, present results shed little light on the question of whether conflict witnessed by the child is related to the amount of aggressiveness and hostility exhibited by the son.

It seems probable that the floor effect seen in many of the scales used in this study (e.g., the hostility exhibited in front of the child as well as the amount of aggressiveness, delinquency and attentional problems exhibited by the boys) may be due to the way assessments are conducted at the CSC. Specifically, it is likely that families who experience a large amount of chaos may not have been recruited for this particular study. For families, initially assessed as being extremely dysfunctional, Rapid Intake Assessments (assessments conducted in morning and feedback given immediately) are performed which would prevent mothers from participating in this study due to time
constraints. Therefore, it is likely that some of the mothers who may have been experiencing a large amount of hostility in the home, and may have sons with severe attentional and conduct disorder problems, were not recruited for the study, due to their high stress level. Additionally, it is likely that subjects who completed questionnaires were from higher functioning families, while many of the solicited participants who did not return questionnaires were individuals whose chaotic home life (perhaps due to child misbehaviors or conflicted relationships) contributed to their failing to complete questionnaires.

It is also possible that the floor effect may have been affected by the sons’ medication regimen. Specifically, some of the questionnaires were completed by mothers whose sons had been on medication for a substantial time period. It is possible that some mothers rated that their behaviors as being less severe at the time of this study, especially when compared to behaviors exhibited prior to the initial evaluation. While medications for ADHD only address the attentional focusing problems of children, it may be that once these attention problems are lessened, the children are less likely to exhibit aggressive and delinquent tendencies as well.
Implications

The results of this study provide more questions for further investigation than they provide definitive conclusions. There are still many questions around how parenting skills affect the development of the conduct disorders. Intuitively a relationship is suspected, but the empirical results continue to be equivocal. One of the principal confounding factors is the correlational nature of the research and the complexity of the genetic vs. environment nature of these disorders. The task facing researchers may be to continue to further delineate the contribution of both biological and psychosocial factors and their interactions. Perhaps studies of offspring of conduct disorder parents could provide a sample of children at high risk for the disorder, so that environmental variables including family functioning could be assessed for its relative contribution to the development of other disorders.

It seems likely based on present findings that new ways of measuring family factors (e.g., parenting skills) need to be developed. Specifically, self-report measures may not be adequate to assess what really goes on in families. Behavioral observations may provide more useful findings.

Additional research could be done to determine if ADHD is currently being overdiagnosed or if parents, teachers and clinicians are doing a better job of recognizing and providing interventions for children with ADHD, even if the
symptoms are mild. Including teacher behavioral report would be one way to increase the validity of the diagnosis. Teacher reports are routinely obtained at the CSC, but were not used in this study due to logistics problem of involving schools and follow-up problems.
APPENDIX A

INFORMED CONSENT, LETTER TO MOTHERS
Dear Mother:

I am an advanced doctoral candidate in Psychology at the University of North Texas. I am currently working on my dissertation and am interested in studying children with Attention-deficit Hyperactivity Disorder and their mothers. I am especially interested in understanding how mothers' relationships with partners affect parenting attitudes and child behaviors. Consequently, I am requesting that you take 45 minutes to complete the following questionnaire.

Also enclosed are two copies of a consent form. Please sign both. The copy with your child's name on it should be kept by you, and the other form should be returned with the questionnaire.

Anonymity will be assured by assigning a number to each child. Names will not be used when integrating and analyzing the data. Therefore, there is no need for you to put your name on the questionnaires. However, if you would like feedback concerning the results of the study, please put you address on the bottom of the returned consent form.

Thank you for your assistance and cooperation, it is greatly appreciated.

Sincerely,

Frances A. Walker, M.S.
INFORMED CONSENT

STUDY OF RELATIONSHIP SUPPORT AND PARENTING STYLE OF MOTHER'S OF CHILDREN WITH ATTENTION-DEFICIT HYPERACTIVITY DISORDER

Consent to Act as a Subject for Research and Investigation:

1. I hereby authorize Frances A. Walker to perform the following investigation:

   Mothers of children with Attention-deficit Hyperactivity Disorder who are receiving treatment at the Child Study Center, 1300 W. Lancaster, Fort Worth, Texas, will be asked to complete a set of questionnaires. The child will be asked to complete a brief set of questions assessing the presence of depressive symptoms. The mother will be asked to complete questionnaires which ask her to report on her child’s behaviors, as well as some of her own feelings, attitudes and behaviors regarding her marital or dating relationship. Mothers will also be asked to answer questions about parenting attitudes and behaviors.

   The anonymity of the children and the mothers will be protected by using a number for each child. The child’s name will be on the respondent’s consent form which accompanies the questionnaires, but these numbers will be used by the investigator only to important information from the chart. This information will only include the following: age, grade and diagnosis of the child; mother’s age, education, ethnicity, marital status, employment and occupation; and family income. After obtaining this information from the chart all identifying information will be kept separate from the questionnaires and only the investigator will have access to it. Names will not be used when integrating and analyzing the data. Feedback concerning the results of the study will be provided to any respondent who includes her name and address on the returned copy of the consent form.

2. I understand that all information will be confidential and that participation in this study is voluntary and in no way related to the services received from this agency. I understand that the investigation described in Paragraph 1 involves no expected risks.

If you have any questions or problems that arise in connection with your participation in this study, please
contact Dr. Charles Guarnaccia, the project director for this study, at the Department of Psychology, University of North Texas, at (817)565-2657.

Signature_________________________________ Date______________

Witness__________________________________ Date______________
APPENDIX B

PARENTING DIMENSIONS INVENTORY
This questionnaire was developed to learn about how parents think and what they do with regard to their children. Different parents will answer these questions differently due to varying circumstances, therefore there are no right or wrong answers. Please read and answer each item according to your personal views or behavior. Even if an answer does not exactly reflect your own opinion or behavior, please choose the response that is closest. Your answers to this questionnaire will be completely confidential.

Please indicate the age of the child.

Child’s age

I. For the questions that follow, you will be asked about your attitudes and behavior toward your child with ADHD. Please answer all questions which follow in regard to this child.

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<tr>
<th>Not at all Accurate of Me</th>
<th>Slightly Accurate of Me</th>
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<th>Fairly Accurate of Me</th>
<th>Quite Accurate of Me</th>
<th>Very Accurate of Me</th>
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1. I encourage my child to talk about his troubles
2. I always follow through on discipline for my child, no matter how long it takes.
3. Sometimes it is so long between the occurrence of a misbehavior and an opportunity for me to deal with it that I just let it go.
4. I do not allow my child to get angry with me.
5. There are times I just don’t have the energy to make my child behave as he should.
6. My child can often talk me into letting him off easier than I had intended.
7. My child convinces me to change my mind after I refused a request.
8. I think a child should be encouraged to do things better than others.
9. My child and I have warm intimate moments together.
10. I encourage my child to be curious, to explore, and to question things.
11. I find it interesting and educational to be with my child for long periods.
12. I don’t think children should be give sexual information.
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<th>Scale</th>
<th>Accurate of Me</th>
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13. I believe that a child should be seen and not heard.  
14. I believe that parents who start a child talking about his worries don't realize that sometimes it is better to leave well enough alone.  
15. I encourage my child to express his opinions.  
16. I make sure my child knows that I appreciate what he tries to accomplish.  
17. I let my child know how ashamed and disappointed I am when he misbehaves.  
18. I believe in toilet training a child as soon as possible.  
19. I believe that most children change their minds so frequently that it is hard to take their opinions seriously.  
20. I have little or no difficulty sticking with my rules for my child even when close relatives (including grandparents) are there.  
21. When I let my child talk about his troubles, he ends up complaining even more.  
22. I expect my child to be grateful and appreciate all the advantages he has.  
23. Once I decide how to deal with a misbehavior of my child, I follow through on it.  
24. I respect my child's opinion and encourage him to express it.  
25. I never threaten my child with a punishment unless I am sure I will carry it out.  
26. I believe that once a family rule has been made, it should be strictly enforced without exception.

II. Listed below are pairs of statements concerning parents' attitudes toward childrearing. For each pair, choose the one statement (A or B) that most represents your attitude, and place a checkmark in front of the letter that precedes that statement. Make sure that you choose A or B for each pair, even if you agree with neither or with both. In these cases, choose the opinion that is closest to or best represents your point of view.

1. A. Nowadays too much emphasis is placed on obedience for children.  
   B. Nowadays parents are too concerned about letting children do what they want.
2. A. Children need more freedom to make up their own minds about things that seem to get today.
   B. Children need more guidance from their parents than they seem to get today.

3. A. I care more than most parents I know about having my child obey me.
   B. I care less than most parents I know about having my child obey me.

4. A. I try to prevent my child from making mistakes by setting rules for his own good.
   B. I try to provide freedom for my child to make mistakes and learn from them.

5. A. If children are given too many rules, they will grow up to be unhappy adults.
   B. It is important to set and enforce rules for children to grow up to be happy adults.

III. For each of the following statements, circle the number which indicates how often the statement is true of your family.

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<tr>
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<th>Never</th>
<th>Once in a While</th>
<th>Sometimes</th>
<th>Frequently</th>
<th>Most of the Time</th>
<th>Always</th>
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</table>

IV. Circle the number of regular assigned chores in the following areas that your child is responsible for.

<table>
<thead>
<tr>
<th></th>
<th>None</th>
<th>One</th>
<th>Two</th>
<th>Three or More</th>
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V. Listed below are several situations which frequently occur in childhood. You may or may not have had these experiences with your child. Imagine that each has just occurred and rate how likely it is that you would do each of the responses listed below the situation.

1. Your child has gone outside without picking up his toys as you requested.

<table>
<thead>
<tr>
<th></th>
<th>Very Unlikely</th>
<th>Very Likely</th>
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</thead>
<tbody>
<tr>
<td>Let situation go</td>
<td>1 2 3 4 5</td>
<td></td>
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<tr>
<td>Take away a privilege (e.g., no TV tonight)</td>
<td>1 2 3 4 5</td>
<td></td>
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<tr>
<td>Assign an additional chore</td>
<td>1 2 3 4 5</td>
<td></td>
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<tr>
<td>Take away something material (e.g., no desert tonight)</td>
<td>1 2 3 4 5</td>
<td></td>
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<tr>
<td>Send to Room</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Physical Punishment</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Reason with child</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Ground child</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Yell at child</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>List and circle anything else you might do:</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Other:</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Other:</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
</tbody>
</table>

2. After arguing over toys your child strikes a playmate.

<table>
<thead>
<tr>
<th></th>
<th>Very Unlikely</th>
<th>Very Likely</th>
</tr>
</thead>
<tbody>
<tr>
<td>Let situation go</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Take away a privilege (e.g., no TV tonight)</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Assign an additional chore</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Take away something material (e.g., no desert tonight)</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Send to Room</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Physical Punishment</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
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<td>1 2 3 4 5</td>
<td></td>
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<td>1 2 3 4 5</td>
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</tr>
<tr>
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<td></td>
</tr>
<tr>
<td>List and circle anything else you might do:</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Other:</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Other:</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
</tbody>
</table>

3. Your child becomes sassy while you discipline him.

<table>
<thead>
<tr>
<th></th>
<th>Very Unlikely</th>
<th>Very Likely</th>
</tr>
</thead>
<tbody>
<tr>
<td>Let situation go</td>
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</tr>
<tr>
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</tr>
<tr>
<td>Send to Room</td>
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<td></td>
</tr>
<tr>
<td>Physical Punishment</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Ground child</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Yell at child</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
</tbody>
</table>
4. You receive a note from your child's teacher that your child has been disruptive at school.

<table>
<thead>
<tr>
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<th>Very Likely</th>
</tr>
</thead>
<tbody>
<tr>
<td>Let situation go</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
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<tr>
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</tr>
<tr>
<td>Yell at child</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>List and circle anything else you might do:</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Other</td>
<td>1 2 3 4 5</td>
</tr>
</tbody>
</table>

5. You catch your child lying about something he or she has done that you would not approve of.

<table>
<thead>
<tr>
<th>Very Unlikely</th>
<th>Very Likely</th>
</tr>
</thead>
<tbody>
<tr>
<td>Let situation go</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Take away a privilege (e.g., no TV tonight)</td>
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</tr>
<tr>
<td>Physical Punishment</td>
<td>1 2 3 4 5</td>
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<tr>
<td>Reason with child</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
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<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Yell at child</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>List and circle anything else you might do:</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Other</td>
<td>1 2 3 4 5</td>
</tr>
</tbody>
</table>

6. You see your child playing at a busy street which you have forbidden him to go near for safety reasons.

<table>
<thead>
<tr>
<th>Very Unlikely</th>
<th>Very Likely</th>
</tr>
</thead>
<tbody>
<tr>
<td>Let situation go</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Take away a privilege (e.g., no TV tonight)</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Assign an additional chore</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Take away something material (e.g., no desert tonight)</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Actions</td>
<td>1</td>
</tr>
<tr>
<td>-------------------</td>
<td>---</td>
</tr>
<tr>
<td>Send to Room</td>
<td></td>
</tr>
<tr>
<td>Physical Punishment</td>
<td>1</td>
</tr>
<tr>
<td>Reason with child</td>
<td>1</td>
</tr>
<tr>
<td>Ground child</td>
<td>1</td>
</tr>
<tr>
<td>Yell at child</td>
<td>1</td>
</tr>
</tbody>
</table>

List and circle anything else you might do:

<table>
<thead>
<tr>
<th>Other actions</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX C

O'LEARY PORTER SCALE OF OVERT HOSTILITY
O'LEARY PORTER SCALE OF OVERT HOSTILITY

Please answer all of the following questions to the best of your ability. The questions refer to your son, , only.

<table>
<thead>
<tr>
<th>Never</th>
<th>Rarely</th>
<th>Occasionally</th>
<th>Often</th>
<th>Very Often</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

1. It is difficult in these days of tight budgets to confine financial discussions to specific times and places. How often would you say you and your partner argue over money matters in front of this child?

2. Children often go to one parent for money or permission to do something after having been refused by the other parent. How often would you say this child approaches you or your partner in this manner with rewarding results?

3. Partners often disagree on the subject of discipline. How often do you and your partner argue over disciplinary problems in this child's presence?

4. How often has this child heard you and your partner argue about your role in the family (e.g., housewife, working wife, etc.)?

5. How often does your partner complain to you about your personal habits (drinking, nagging, sloppiness, etc.) in front of this child?

6. How often do you complain to your partner about his personal habits in front of this child?

7. In every normal intimate relationship there are arguments. What percentage of the arguments between you and your partner would you say take place in front of this child?

8. To varying degrees, we all experience almost irresistible impulses in times of great stress. How often is there physical expression of hostility between you and your partner in front of this child?

9. How often do you and your partner display verbal hostility in front of this child?

10. How often do you and your spouse display affection for each other in front of this child?
HOPKINS CHECKLIST

Instructions: Below is list of problems and complaints that people sometimes have. Please read each one carefully. After you have done so, please rate how much that problem has bothered or distressed you DURING THE PAST WEEK INCLUDING TODAY. To make your ratings, use the scale shown below:

a. not at all
b. a little bit
c. quite a bit
d. extremely

You will be making all of your ratings on the answer sheet that has been provided.

EXAMPLE: If you feel that "backaches" have been bothering you quite a bit during the past week, you would record your response as shown below:

Backaches

A  B  C  D

During the past week, including today, how much were you bothered by:

1. Headaches
2. Nervousness or shakiness inside
3. Being unable to get rid of bad thoughts or ideas
4. Faintness or dizziness
5. Loss of sexual interest or pleasure
6. Feeling critical of others
7. Bad dreams
8. Difficulty in speaking when you are excited
9. Trouble remembering things
10. Worried bout sloppiness or carelessness
11. Feeling easily annoyed or irritated
12. Pains in the heart or chest
HOPKINS CHECKLIST (continued)

13. Itching
14. Feeling low in energy or slowed down
15. Thoughts of ending your life
16. Sweating
17. Trembling
18. Feeling confused
19. Poor appetite
20. Crying easily
21. Feeling shy or uneasy with the opposite sex
22. A feeling of being trapped or caught
23. Suddenly scared for no reason
24. Temper outbursts you could not control
25. Constipation
26. Blaming yourself for things
27. Pains in the lower part of your back
28. Feeling blocked in getting things done
29. Feeling lonely
30. Feeling blue
31. Worrying too much about things
32. Feeling no interest in things
33. Feeling fearful
34. Your feelings being easily hurt
35. Having to ask other what you should do
36. Feeling others do not understand
37. Feeling that people are unfriendly or dislike you
HOPKINS CHECKLIST (continued)

38. Having to do things very slowly to insure correctness
39. Heart pounding or racing
40. Nausea or upset stomach
41. Feeling inferior to others
42. Soreness of the muscles
43. Loose bowel movements
44. Trouble falling asleep
45. Having to check and double-check what you do
46. Difficulty making decisions
47. Wanting to be alone
48. Trouble getting your breath
49. Hot or cold spells
50. Having to avoid certain things, places or activities because they frighten you
51. Your mind going blank
52. Numbness or tingling in parts of your body
53. A lump in your throat
54. Feeling hopeless about the future
55. Trouble concentrating
56. Feeling weak in parts of your body
57. Feeling tense or keyed up
58. Heavy feelings in your arms or legs
APPENDIX E

INVolVEMENT SCALE
Involvement Scale

1. Are you currently involved in any intimate heterosexual relationship? _____ yes _____ no

2. Are you currently married?
   _____ yes _____ no

3. Are you currently in a dating relationship?
   _____ yes _____ no

4. On average, how many nights a week does this person spend in your home (or with you and your child)?
   0 ___, 1 ___, 2 ___, 3 ___, 4 ___, 5 ___, 6 ___, 7 ___

5. How many hours does this person spend with your child (this may involve watching t.v., eating meals, driving together)?
   0 ___, 1 ___, 2 ___, 3 ___, 4 ___, 5 ___, 6 ___, 7 ___, 8 ___, 9 ___

6. How much time per week does this person spend directly participating in activities with your child (e.g., helping with homework, playing games)?
   less than 5 minutes
   5 to 30 minutes
   30 minutes to 1 hour
   1 to 2 hours
   2 to 3 hours
   3 to 4 hours
   more than 4 hours per week

7. How often does this person discipline your child(ren) (e.g., tell the child(ren) not to do something or tell child when to go to bed)?

   Never  Rarely  Occasionally  Often  Very Often
   1     2     3     4     5
8. How often does this person watch your children when you are not there?

Never    Rarely    Occasionally    Often    Very Often
1         2         3         4         5

9. How often do you discuss parenting issues or problems related to your child with this person?

Never    Rarely    Occasionally    Often    Very Often
1         2         3         4         5

10. How often does he talk to you about how you raise your child or children?

Never    Rarely    Occasionally    Often    Very Often
1         2         3         4         5

11. How often do his ideas affect the way you interact (deal) with your child?

Never    Rarely    Occasionally    Often    Very Often
1         2         3         4         5

12. How satisfied do you feel in your relationship with your husband/boyfriend.

1    Very Dissatisfied
2    Somewhat Dissatisfied
3    Neither Satisfied or Dissatisfied
4    Somewhat Satisfied
5    Very Satisfied

13. How committed are you to this relationship with your husband/boyfriend?

1    Not Committed
2    Slightly Committed
3    Somewhat Committed
4    Committed
5    Completely Committed
14. How many needs do you feel are met by this relationship with your husband/boyfriend?

1 None of them
2 Some of them
3 Many of them
4 Most of them
5 Nearly all of them

15. How confident do you feel that you will be involved with this person at this time next year?

1 Very confident
2 Moderately confident
3 Somewhat confident
4 Not very confident
5 Not at all confident

16. Do your child(ren) expect you to be involved with this person at this time next year?

1 Yes
2 Probably
3 Unsure
4 Probably not
5 No

17. Does this person live with you?

_______ yes _______ no

18. If you are not married to this person, do you have plans to marry this person?

_______ yes _______ unsure _______ no

19. How many different dating or marital relationships have you been involved in within the last year? _______
Table 1
Means, Standard Deviations, and Ranges for Participant Characteristics

<table>
<thead>
<tr>
<th>Internal Characteristics</th>
<th>Range</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mother’s Age (Yrs.)</td>
<td>25-53</td>
<td>35.15</td>
<td>6.18</td>
</tr>
<tr>
<td>Length of Marriage (Yrs.)</td>
<td>0-27</td>
<td>11.68</td>
<td>6.14</td>
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<tr>
<td>Hours Worked Per Week</td>
<td>0-50</td>
<td>22.28</td>
<td>17.86</td>
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<td>Education (Yrs.)</td>
<td>9-20</td>
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<tr>
<td>No. of Children in Home</td>
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<td>2.03</td>
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<td>Age of Son with ADHD (Yrs.)</td>
<td>4-15</td>
<td>8.88</td>
<td>2.53</td>
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<tr>
<td>Grade of Son with ADHD (Yrs.)</td>
<td>0-10</td>
<td>3.59</td>
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<tr>
<td>Time since Diagnosis (Yrs.)</td>
<td>0-9.9</td>
<td>2.37</td>
<td>2.25</td>
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Table 2

**Characteristics of Participants**

<table>
<thead>
<tr>
<th>Nominal Characteristics</th>
<th>%</th>
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<tbody>
<tr>
<td><strong>Marital Status</strong></td>
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<td>Single</td>
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<td>Married</td>
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<tr>
<td>Divorced</td>
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<td>Separated</td>
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<td>African American</td>
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<td>Hispanic</td>
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<tr>
<td>Asian American</td>
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<td>Native American</td>
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<td>Other</td>
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<td><strong>Yearly Income</strong></td>
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<td>$0 - $9,000</td>
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<td>$10,000 - $19,999</td>
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<td>Over $90,000</td>
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<td><strong>Other Childcare Assistance</strong></td>
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Table 3

**Items and Reliability Coefficients of Involvement Scale**

<table>
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<tr>
<th>Factor Items</th>
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<tbody>
<tr>
<td>Overall Scale</td>
<td>.92</td>
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<tr>
<td>Time Spent as Parental Figure</td>
<td>.90</td>
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<tr>
<td>4. How many nights per week does this person in your home</td>
<td></td>
</tr>
<tr>
<td>5. Hours per week spent with children</td>
<td></td>
</tr>
<tr>
<td>6. Time per week with child directly doing things</td>
<td></td>
</tr>
<tr>
<td>7. How often does person discipline</td>
<td></td>
</tr>
<tr>
<td>8. How often does person watch child without you being there</td>
<td></td>
</tr>
<tr>
<td>Ideas on Parenting</td>
<td>.76</td>
</tr>
<tr>
<td>9. How often do you discuss parenting issues</td>
<td></td>
</tr>
<tr>
<td>10. How often do you talk about how to raise children</td>
<td></td>
</tr>
<tr>
<td>11. How often do his ideas affect the way you deal with your children</td>
<td></td>
</tr>
<tr>
<td>Commitment/Satisfaction</td>
<td>.91</td>
</tr>
<tr>
<td>12. How satisfied are you with relationship</td>
<td></td>
</tr>
<tr>
<td>13. How committed are you to relationship</td>
<td></td>
</tr>
<tr>
<td>14. How many needs are met by relationship</td>
<td></td>
</tr>
<tr>
<td>15. How confident are you that you will be in relationship next year</td>
<td></td>
</tr>
<tr>
<td>16. Do you kids expect you to be in relationship</td>
<td></td>
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</tbody>
</table>
Table 4

Means, Standard Deviations, and Reliability Coefficients for Scales

<table>
<thead>
<tr>
<th>Scale</th>
<th>Mean</th>
<th>SD</th>
<th>Alpha</th>
<th>N</th>
<th>Range</th>
<th>Clinical Cutoff Range</th>
<th>Possible Range</th>
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</thead>
<tbody>
<tr>
<td>Mom’s Depression</td>
<td>10.32</td>
<td>7.73</td>
<td>.91</td>
<td>100</td>
<td>0-31</td>
<td>0-33</td>
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<td>Nurturance</td>
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<td>.82</td>
<td>100</td>
<td>12-36</td>
<td>6-36</td>
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</tr>
<tr>
<td>Responsiveness to Child</td>
<td>22.99</td>
<td>4.30</td>
<td>.50</td>
<td>100</td>
<td>10-30</td>
<td>5-30</td>
<td></td>
</tr>
<tr>
<td>Nonrestrictive Attitude</td>
<td>30.26</td>
<td>6.20</td>
<td>.67</td>
<td>100</td>
<td>7-42</td>
<td>7-42</td>
<td></td>
</tr>
<tr>
<td>Consistency</td>
<td>31.83</td>
<td>7.89</td>
<td>.81</td>
<td>100</td>
<td>9-48</td>
<td>8-48</td>
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</tr>
<tr>
<td>Organization</td>
<td>14.99</td>
<td>4.43</td>
<td>.80</td>
<td>100</td>
<td>5-23</td>
<td>4-24</td>
<td></td>
</tr>
<tr>
<td>Amount of Control</td>
<td>25.72</td>
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REFERENCES


