

DO NONRESIDENT FATHERS MATTER?: ASSOCIATIONS BETWEEN
NONRESIDENT FATHERING AND ADOLESCENT FUNCTIONING

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ABSTRACT

MICHAEL T. MCRAE: Do Nonresident Fathers Matter? Associations Between Nonresident Fathering and Adolescent Functioning
(Under the direction of Vonnie C. McLoyd, PhD)

The present study examined the relationship between nonresident father involvement and adolescent psychosocial functioning among Black and White adolescents. The study sample, drawn from Wave 2 of the National Survey of Families and Households, included 372 adolescents who resided with their biological mother, had a nonresident father, and had no male figure in the household. Analysis indicated that nonresident fathers who had conflictual relationships with resident mothers had more contact with their children. Overall, the quality of the nonresident father-child relationship was a weak predictor of adolescent outcomes, particularly when controlling for the mother-child relationship. However, frequency of father contact was related to poorer adolescent adjustment when quality of the father-child relationship was poor. Conflict in the resident mother-nonresident father relationship was associated with higher levels of adolescent externalizing behavior. Findings of the study suggest that a more holistic conceptualization of nonresident father involvement is needed in order to understand the unique influence of nonresident fathers on adolescent adjustment. Implications of the findings and directions for future research are discussed.

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CHAPTER 1

INTRODUCTION

In 1960, nearly three-fourths of children in the United States lived with both biological parents. Recent estimates suggest that 50 percent of children will live apart from their biological father before they reach adulthood (Bianchi, 1990; King & Sobolewski, 2006). These estimates are based primarily on the increasingly high rates of divorce and nonmarital childbirths in the country (Stewart, 2003). Prompted by these trends, single parent households have received increasing attention in the psychological, sociological, and anthropological research literature.

In the past, there was general consensus among researchers that children from two-parent households exhibited fewer problem behaviors than those living in single-parent headed households (see Amato & Keith, 1991; Demo & Acock, 1988). These studies relied heavily on the presumptions that: 1) parental separation is always traumatic for children, and 2) two-parent households provide more structure and better environments for the children. These blanket presumptions have since been tested and debunked in many studies (e.g., Paxton, Valois, & Drane, 2006; Vandewater & Lansford, 1998). To the contrary, the parent-parent dynamic and the parent-child relationship in both intact and nontraditional families have consistently been shown to be more robust predictors of youth adjustment.

In contrast to the abundance of empirical studies examining maternal influence (from single and two-parent households) on youth outcomes, research examining the unique impact of nonresident fathers is relatively sparse. In fact, Phares, Fields, Kamboukos, and Lopez

(2005) reported that only 10 percent of the studies on parent-youth relationships examined fathers, while others examined the role of only mothers (60%) or the joint role of both parents simultaneously (30%).

The unique contribution of nonresident fathers to adolescent functioning is especially important to study. During adolescence, youth undergo marked changes in cognitive, physical, identity, and social development (Erickson, 1959; Lamb, 1997). Although researchers are split about whether the quality of the parent-child relationship changes during adolescence (e.g., Collins, 1990; Holmbeck, 1996; Laursen, Coy, & Collins, 1998; Paikoff & Brooks-Gunn, 1991; Steinberg, 1990), increases in the prevalence of internalizing and externalizing problems during this developmental stage are well documented (Moffitt, 1993; Roberts, Andrews, Lewinsohn, & Hops, 1990). There is also widespread consensus that adolescents benefit greatly from general parental guidance and support as they navigate this period (Amato & Gilbreth, 1999; Baumrind, 1968; Williams & Kelly, 2005). Previous cross-sectional and longitudinal research has linked the quality of adolescents' relationships with their parents to problem and risk taking behaviors as well as emotional difficulties (e.g., Garber, Robinson, & Valentiner, 1997; Kerr & Stattin, 2000; Pettit, Laird, Dodge, Bates, & Criss, 2001; Steinberg, Mounts, Lamborn, & Dornbusch, 1991). Given the robust findings suggesting a clear link between the parent-child relationship and adolescent psychosocial functioning as well as the rising prevalence of single-parent headed households, it is surprising that research investigating the link between adolescent functioning and the quality of the nonresident father-adolescent relationship is rather sparse.

Much of the early empirical research on parental influence minimized the overall influence of fathers, irrespective of resident status. Analyzing a nationally representative

sample, Stewart and Eggebeen (1991) suggested that nonresident fathers are essentially disposable forms of social capital and easily replaced by other male figures. In this study, they found that mothers had the most influence and impact on the development of their children. Furthermore, they concluded that resident non-biological, social fathers (e.g., grandfathers, stepfathers, etc.) contributed just as much as resident fathers. Furstenberg (1988) further argued that, even within two-parent households, fathers must be highly (not even moderately) involved to benefit a child's psychosocial adjustment. The researchers based their argument on the premise that fathers, regardless of resident status, play a secondary role to mothers in caregiving and nurturing "responsibilities" and thus, have much less influence on youth well-being.

More recent research clearly shows that in two parent households, both the mother and father play an important role in healthy child adjustment (Lamb, 1997). Parke (2003) argued that active resident fathers play an extremely important role in children's peer relations and academic functioning. He posited that children with active fathers grow up to be more intellectually, academically, and socially developed than those without fathers or inactive resident fathers. Parke also contended that although mothers are often considered the "emotional brokers" of the family, resident fathers have more influence on their children's emotional and academic functioning than mothers. However, the author did not address the role of nonresident fathers, nor how they might uniquely impact adolescent functioning.

Researchers continue to have difficulty operationalizing nonresident father involvement as a unique process that differs from resident fathering. Nonresident fathers often lack the same opportunities and legal rights to engage in the level or kinds of activities

as resident fathers. It is unknown if children of uninvolved resident fathers are at increased risk for maladjustment compared to children of involved nonresident fathers. Similarly, there is no current research examining the impact of positive (or negative) father-child relationships as a function of resident status. Research on nonresident fathers has often conceptualized the nonresident fathering process in ways that may be more appropriate for the resident father-child relationship. Amato and Gilbreth (1999) were among the first to note this inappropriateness, and attributed inconsistent findings in the literature to this erroneous conceptual framework. Stewart (1999) also argued that there is limited understanding of the unique nature and value of nonresident father involvement. Because of these operationalization difficulties, the extant research examining nonresident fathering and adolescent functioning has been predominately atheoretical. Stewart (1999) noted that researchers often “dump” a number of seemingly important variables into multiple regression equations without providing sound theoretical reasons for doing so, and called for studies that examine whether the impact of various fathering techniques and characteristics differs as a function of resident status. Although the current study does not investigate differences between resident and nonresident fathers’ impact on adolescent functioning, it does attempt to identify the unique pattern of influence that nonresident fathers have on their adolescents’ externalizing and risk taking behaviors.

Financial Child Support and Adolescent Functioning

Financial support is among the factors that have consistently been associated with adolescent outcomes (Stewart, 1999). Specifically, it has been repeatedly shown that the financial contribution of fathers, resident or nonresident, is positively related to adolescents’ standard of living, health, educational attainment, and general well-being (e.g., King, 1994;

McLanahan, Seltzer, Hanson, & Thompson, 1994). Some have proposed models where parenting characteristics and practices resultant of fluctuations in earnings (and thus, fluctuations in the ability to provide financial support) mediate (McLoyd, 1989) or moderate (Coleman, 1994; Teachman, Paasch, & Carver, 1997) the link between financial support and youth well-being. Furstenberg and Cherlin (1991) proposed a model theorizing that consistent monetary support lessens the stress on the primary parent, allowing him/her to engage in more effective parenting practices, develop a stronger parent-child relationship, and better maintain their own psychological health, leading to more adaptive youth adjustment. In the case of the nonresident father, consistent financial support is presumed to improve the mother-child relationship, resulting in healthier adolescent psychosocial development.

The existing literature on nonresident father financial support has largely ignored if and when the mother's subjective satisfaction with these payments is just as robust a predictor as the amount of financial support itself. The amount of child support is presumed to be related to maternal stress, but as women's salaries continue to steadily rise over time, it is possible that the actual amount may be a poorer predictor of the mother's stress than whether the mother is satisfied with the payments. The current study examines not only the amount of annual financial child support provided by nonresident fathers, but also takes into account the mother's satisfaction with this support.

Frequency of Contact and Adolescent Functioning

The most frequently examined construct linking nonresident father involvement to adolescent functioning is the amount of contact a father has with his child. Researchers using national datasets estimate that 19 percent of nonresident fathers have no contact with their

children immediately following divorce, and 32 percent have no contact with their children ten years later (e.g., King, 1994; Phares, 1993; Seltzer, 1991; Spruijt & Iedema, 1998).

Research also indicates that, following parental separation, nonresident fathers are more likely to maintain contact and involvement with their sons than with their daughters (Cooney, 1994).

In contrast to studies on financial support, however, the findings linking nonresident father contact and adolescent functioning are less convincing. Amato and Gilbreth's (1993) analysis indicated that findings from 32 studies on contact between nonresident fathers and youth adjustment were very mixed. Fifteen of the studies found that contact was positively related to children's adjustment, seven found a negative association, and 10 found no significant relationship at all. Findings from subsequent studies have also lacked consistency (Amato & Gilbreth, 1999; Seltzer, 1994; Spruijt, de Goede, & Vanderwalk, 2004). These mixed findings are suggestive of moderating variables that influence under what conditions the amount of father contact is related to youth well-being. Clearly there is a need to identify the underlying mechanisms that account for the inconsistent findings on the relationship between frequency of father-child contact and adolescent functioning.

The inconclusive findings in this area may initially seem surprising, as research has consistently shown that contact is important within two-parent households (Furstenberg, 1988). Scholars have theorized about why studies have not consistently found a significant relationship between nonresident father contact and adolescent outcomes. One of these explanations centers around the types of parenting nonresident fathers tend to employ. Authoritative parenting, marked by an affirmation of children's present abilities while also setting appropriate behavioral expectations, has repeatedly been shown to be associated with

the quality of the parent-child relationship and, as a result, youth adjustment. Children with authoritative parents feel more confident and secure, and maintain a positive parent-child relationship, which leads to fewer behavior problems across childhood and adolescence. Furstenberg and Nord (1985) contended that many nonresident fathers with frequent contact fail to utilize authoritative parenting practices or spend “quality time” with their children during visits. Stewart (2003) pointed out that frequency of contact is not necessarily associated with more effective parenting skills or the overall quality of the parent-child relationship. In fact, Furstenberg and Cherlin (1991) found that regular visitation with uncaring noncustodial fathers led to increased youth behavior problems over time. It has also been argued that what happens during visits with noncustodial parents and how adolescents feel about the visits are more meaningful than how frequently visits occur (Amato & Gilbreth, 1999).

Researchers have frequently described nonresident fathers as “Disneyland Dads” who utilize their visitation time to engage primarily in leisurely activities instead of more authoritative parenting practices typically associated with positive child outcomes, such as helping with homework, eating meals together, disciplining properly, and setting appropriate limits (Furstenberg & Nord, 1985; Stewart, 1999). Furstenberg and Nord (1985) also found that nonresident fathers who engaged in these Disneyland activities tended to have weaker emotional ties with their children.

Theories from relationship scholars suggest that frequent contact is an optimal, but not essential, condition for establishing and maintaining a close nonresident father-child relationship (Bersheid & Peplau, 1983). In fact, Furstenberg and Nord (1985) conducted a study on a nationally representative sample of adolescents with nonresident fathers and found

that almost 80% of the adolescents perceived a close relationship with their father even when contact was infrequent. Silverstein and Bengtson (1997) reported similar findings, concluding that frequency of contact was only weakly related to relationship closeness. Together, these findings suggest that frequency of contact may be a weak proxy for the affective quality of the nonresident father-child relationship, and that the contact should be considered within the context of other important parenting variables repeatedly found to be associated with youth outcomes.

Father-Child Relationship Quality and Adolescent Functioning

The mother-child dyadic relationship has been studied extensively, and has consistently been directly and indirectly linked to youth psychosocial functioning (Baumrind, 1968; Deater-Deckard & Dodge, 1997; McLoyd & Smith, 2002). In addition, studies of two-parent households generally show that a strong father-child relationship is associated with positive child outcomes, such as low levels of psychological distress and delinquency (Parke, 2003; Repinski & Zook, 2005). For many years, scientists have argued that variables related to parent-child relationship quality need be included when studying youth outcomes, and this argument has been consistently upheld by empirical evidence linking the two (Baumrind, 1968; Davies & Cummings, 1994).

Theories based on two-parent households suggest that closeness in the parent-child relationship impacts children's externalizing behaviors through numerous processes. Social learning theorists posit that the closer children feel to their parents, the more likely they are to obey family rules and emulate parental functioning (Bandura, 1978), facilitating the internalization of prosocial behavior. Adolescents' emulation of parental behavior and adherence to family rules is not just limited to positive behaviors. Those parents who exhibit

antisocial behaviors are also more likely to raise offspring who engage in similar activities (Zoccolillo et al., 2005). It has also been theorized that the lack of a strong parent-child emotional tie leads to low emotional security, which, in turn, lessens children's ability to cope with stress, making them more vulnerable to negative outcomes as well as increased internalizing and externalizing difficulties (Davies & Cummings, 1994; Pleck, 1997; Veneziano & Rohner, 1998).

In a fairly recent meta-analysis, Amato and Gilbreth (1999) reviewed 63 studies of nonresident father involvement and children's well-being, and found that two separate dimensions of nonresident fathering -- closeness and authoritative parenting -- were most predictive of child externalizing and internalizing behaviors, both in the expected direction. Consistent with previous theories (Davies & Cummings, 1994; Pleck, 1997; Veneziano & Rohner, 1998), the researchers concluded that children who are closer to their fathers feel more open to talking about their problems with their fathers. This helps them to cope better, which leads to less psychological distress and eventually fewer difficulties with depression, anxiety, and externalizing behavior problems. The Amato and Gilbreth meta-analysis reaffirmed the existent findings with regard to the frequency of contact and financial support as predictors of adolescent functioning. The researchers concluded that the affective quality of the relationship as well as the father's parenting style is more important than simple frequency of contact.

Most research studies examining the impact of the parent-child relationship on adolescent well-being have focused primarily on mothers, and this is likely due to the fact that mothers most often assume the role of primary caretaker and nurturer within families (Stewart, 1999). In fact, some researchers have deemed the strength of maternal parenting

qualities to be the best predictor of adolescent outcomes and have called on scholars to control for the mother-child relationship when assessing the unique impact of the father (Stewart & Eggebeen, 1991). Although much less common, it has also been argued that fathers contribute more to adolescent wellbeing than mothers (Parke, 2003). Even still, these studies have generally been conducted within the context of two-parent households (Amato & Gilbreth, 1999).

Although few studies have examined the nonresident father's role in shaping adolescent risk behaviors more broadly, there are some who have attempted to specifically address gender as an important contextual factor with regard to adolescent sexual behavior. It is possible that, for boys, fathers function as models for appropriate sexual interactions with women. Following this logic, the father's interactions with women may play an important part in shaping their adolescent son's sexual practices. For girls, Draper and Harpending (1982) proposed that fathers model appropriate emotional responsiveness toward females to their daughters. Although Scharf and Mayseless (2008) found that the father-daughter relationship was not associated with earlier sex or number of sexual partners, they did find that daughters with better relations with their fathers also had better relations with romantic partners. This is consistent with Collins and Read's (1994) theory that argues that the quality of a daughter's relationship with her father is part of the prototype on which girls base their style of relationships with men, including romantic relations. Overall, it seems fathers may play an important role in shaping their adolescents' intimate behaviors and relationships, and this may vary by gender. It remains unclear whether the father's resident status is a critical contextual factor in this regard.

Assuming that nonresident fathers do impact their adolescents' development, it is critical that researchers continue to identify contextual factors with the most potential to facilitate or impede the development of a close nonresident father-child relationship. This seems particularly important given that nonresident fathers' contact with their children increasingly declines after parental separation (King, 1994; Parke, 2002; Seltzer, 1991, Spruijt & Iedema, 1998), granting more access for sources outside the nonresident father-adolescent dyad to influence the relationship. In the next section, I turn my attention to the impact of the resident mother-nonresident father relationship on adolescent adjustment.

The Resident Mother-Nonresident Father Relationship and Adolescent Functioning

Research has linked the quality of relations between parents to adolescent externalizing and risk taking behaviors (Buehler & Gerard, 2002; Harold, Shelton, Goeke-Morey, & Cummings, 2004). Benson, Buehler, and Gerard (2008) suggested that marital conflict negatively impacts adolescents via spillover in mothers' parenting characteristics and techniques, such as harsh parenting, psychological control, parental acceptance, and inconsistency. Also, high interparental conflict within two-parent households leads to greater father emotional detachment (Harris, Furstenberg, & Marmer, 1998). Similar findings have been reported for interparental conflict after parental separation (Lamb, 1997). Despite this convincing evidence in the marital literature, much less is known about how interparental conflict affects the nonresident father-child relationship and, in turn, adolescent functioning.

The resident mother-nonresident father relationship is generally thought to be uniquely and highly conflictual when compared to marital relationships in two-parent households (Lamb, 1997). The association among the mother-father relationship, father-child relationship, and adolescent adjustment is complex, as researchers have found that the

mother-father relationship can both moderate the relationship between nonresident father involvement and adolescent well-being (Amato & Rezac, 1994) and be moderated by father involvement in predicting similar outcomes (King & Heard, 1999). Resident mother-nonresident father relationships are more vulnerable to conflict for several reasons. Seltzer, McLanahan, and Hanson (1998) posited that more stringent enforcement of child support laws may raise the level of interparental discord and conflict by eliciting resentment from fathers who do not wish to pay child support. It may also be possible that fathers who provide adequate financial support for their children meet opposition after they demand greater decision-making authority and increased visitation rights. Visitation is one of the most common causes of conflict after parents split (Arendell, 1986). Research indicates that, in general, custodial mothers often wish their children had more frequent contact with their fathers (Lamb, 1997).

Given the influential role of mothers, it seems reasonable to hypothesize that their relationships with nonresident fathers would also be related to adolescents' functioning. Mothers who have poor relationships with nonresident fathers may engage in gate-keeping behaviors, impeding the development of a healthy father-child relationship. There is widespread consensus among researchers that high interparental conflict has the potential to seriously undermine a child's social, emotional, and academic development, both within and outside the marriage context (Buchanan, Maccoby, & Dornbusch, 1996; Emery, 1994). Spruijt, de Goede, and Vandervalk (2004) found that a highly conflictual divorced mother-father relationship was associated with higher levels of adolescent internalizing and externalizing problems.

It is also possible that high interparental conflict may impede adolescent functioning by forcing adolescents to choose between their primary caretaker (generally the mother) and a father who is generally less involved by virtue of his resident status. Goldstein, Freud, and Solnit (1979) coined this phenomenon “the loyalty complex”. That is, children with strong emotional ties to parents who are experiencing conflict become triangulated or “caught in the middle,” leading to guilt, withdrawal or rejection from both parents, and acting out behaviors as well. Goldstein and colleagues suggested that the loyalty complex is most evident during middle childhood and dissipates as adolescence progresses, when children more readily make allegiances to one parent or the other.

Buchanon, Maccoby, and Dornbusch’s (1991) study refuted Goldstein and colleagues’ (1979) theory, finding that age was positively related to adolescents’ feeling of being triangulated by interparental conflict. They argued that as adolescents become more cognitively able to see two points of view, they become more susceptible to developing internal conflicts about the parent to whom they are most loyal. They further argued that disputing parents are more likely to confide in adolescents about the other parent’s faults, continuing to triangulate them. Buchanon and colleagues’ study indicated that adolescents who felt “caught in the middle” of their parents’ interpersonal problems were higher on externalizing behavior problems as a result of this internal conflict. However, the researchers did not assess the child’s relationship with either parent and, therefore, may have overlooked an important aspect of the “loyalty complex” theory. It might be argued that emotional closeness to both parents overrides adolescents’ perceptions of having to choose one parent over the other. The current study examined the relationship between interparental conflict and adolescent functioning as a function of the nonresident father-child relationship quality.

Several researchers have found that interparental conflict impacts the frequency of a father's contact with his child. In Ahrons and Miller's (1993) investigation, interparental conflict was negatively associated with nonresident father-child contact, and cooperative, supportive coparenting led to an increase in paternal involvement. The researchers concluded that fathers purposefully minimize contact and involvement with their children in order to avoid arguments with the children's resident mothers. In a national sample of younger children born outside of wedlock, Ryan, Kalil, and Ziol-Guest (2008) looked at fathers' contact with their children over time and found that more positive interparental relationships predicted higher father involvement over time. Others have found that mothers' agreement and satisfaction with the visitation arrangement moderated the contact-adolescent functioning link (Amato & Rezac, 1994). When mothers were not satisfied with the visitation arrangements and father-child contact was high, children displayed more behavior problems. King and Heard (1999) reported similar findings, concluding that mother's dissatisfaction with their relationships with fathers was predictive of greater behavior problems and general maladjustment only when father contact was high. Although the authors did not present a solid theoretical argument for why this may be the case, it might be argued that mothers who feel dissatisfied with their relationship with nonresident fathers also triangulate their children, causing adjustment difficulties. Unfortunately, the Kind and Heard study did not assess the level of interparental conflict caused by mother's dissatisfaction.

Very little discussion has been devoted to the question of gender differences in how children react to interparental conflict. Buchanon, Maccoby, and Dornbusch (1991) posited that adolescent girls are particularly affected by the loyalty complex. They argue that because girls are generally more concerned with maintaining harmonious relationships, they

may experience higher levels of distress as a result of feeling “caught in the middle” of feuding parents. However, nothing is known about if and how this concern for girls affects the father-child relationship. This seems like a logical question given that even fathers within two-parent households are more involved with their sons than their daughters (Harris, Furstenberg, & Marmer, 1998), and the discrepancy in involvement increases as children enter into and pass through adolescence (Parke, 2002).

Goals of the Current Study

The goal of the present study is two-fold. First, the study aims to provide a more nuanced examination of the impact of nonresident father involvement and the nonresident father-child relationship on adolescent functioning, specifically in the areas of externalizing and risk taking behaviors. The study investigates contextual factors that might explain the ways that nonresident fathers uniquely impact adolescent psychosocial functioning above and beyond what can be accounted for by resident mothers’ relationships with their children. The second goal of the study is to shed further light on the impact of interparental conflict on the nonresident father-child relationship and, in turn, adolescent functioning.

Given the gaps and findings in the current literature on the associations among nonresident father involvement, interparental conflict, and adolescent externalizing and risk taking behaviors, the study’s hypotheses were as follows:

- 1) Father-child relationship quality will moderate the relationship between the frequency of contact and adolescent externalizing behaviors. Father contact will be negatively associated with adolescent problem behaviors when father child-relationship quality is high, positively related when relationship quality is low, and unrelated when relationship quality is moderate.

- 2) Frequency of nonresident father contact will mediate the relationship between adolescent gender and father-child relationship quality.
- 3) Interparental conflict will mediate the relationship between financial child support and adolescent problem behaviors.
- 4) Interparental conflict will be negatively associated with frequency of nonresident father contact. Nonresident fathers who have highly conflictual relationships with the custodial mothers will have less contact with their children, controlling for the amount of time parents have been separated.
- 5) Father-child relationship quality will moderate the relationship between interparental conflict and adolescent problem behaviors. Adolescents whose parents have highly conflictual relationships will exhibit more problem behaviors when the father-child relationship quality is high. When the father-child relationship quality is low, the impact of interparental conflict on adolescent behavior problems will be negligible.
- 6) Father contact will moderate the relationship between interparental conflict and adolescent problem behaviors such that conflict will be associated with poorer adolescent functioning when contact is high. Interparental conflict will not be associated with adolescent functioning when the level of contact is low or moderate.

CHAPTER 2

METHOD

Overview

The current study is based on data from the National Survey of Families and Households (NSFH), a longitudinal study designed to examine a broad range of American family structures, processes, and relationships from a multidisciplinary perspective (see Sweet, Bumpass, & Call, 1988). The NSFH included interviews with a national probability sample of 13,017 respondents. The sample included a main cross-section sampling of 9,643 households as well as an oversampling of Puerto Rican and Black families, single parents, and cohabiters. One adult per household was randomly selected as the primary respondent to complete a brief telephone interview. If the primary respondent had one or more biological children in the household between age 5 and 17, one of these children (termed the “focal child”) was randomly selected to participate in the study.

Shortly following the initial telephone interview, the primary respondent was asked to complete a face-to-face interview. On average, the interview lasted approximately one hour and forty minutes. Data collected during this interview included the participant’s retrospective accounts of their family living arrangements in childhood, marital and cohabitation experiences, parental and child relationships, and psychological well-being. Following the primary respondent’s interview, the focal children also had a face-to-face semi-structured interview, and this typically lasted 30 to 40 minutes. Children were asked questions about their schooling, recreational activities and preferences, and activities with

their family (as a whole). This data, collected in 1987 and 1988, constituted Wave 1 of the NSFH.

Face-to-face interviews were completed five years after the respondents' original contact with the study, and a response rate of 81.7% was obtained (Wave 2; NSFH2). Eight percent of the original respondents refused to complete the interview and another 6% were unable to be located. There were no systematic differences in response rates across demographic groups, with the exception that those primary respondents between 18 and 20 at Wave 1 were more likely to be untraceable at Wave 2 when compared to other age groups (Sweet & Bumpass, 1996). Two adolescent outcome items were consistent across Waves 1 and 2 (i.e., bullies others and loses temper easily), and returning focal adolescents did not differ from those who did not complete the second wave on these two items. The total sample at Wave 2 consisted of 10,008 of the original primary respondents, and 1,415 focal children between the ages of 10 and 17. For the purposes of this study, data from Wave 2 was used because it included interviews completed by the focal child as well as data about nonresident fathers. Data about race and child gender came from Wave 1, while the remainder of the data was taken from Wave 2.

Participants

The sample for the current study consists of 372 Black (N=114) and White (N=258) youth between the ages of 10 and 17 who lived with their biological mothers, had a biological father living elsewhere, and no male/father figure living in the household. White adolescents were assigned a code of 0 (zero) and Black adolescents were assigned a code of 1 (one). The sample includes those adolescents whose parents were once married and are now divorced or legally separated, as well as those children whose parents never married.

Approximately 53% of the focal adolescents were female and the average age of the adolescents was 13.46 years (SD=2.20). In the current study, adolescent girls were coded as 0 (zero) and boys were coded as 1 (one). The average household income of the current sample was \$19,710 (SD=\$15,878). Due to relatively small group numbers, Hispanic (N=29), Asian (N=2), and “Other Ethnic” (N=3) participants who otherwise would have been eligible for inclusion in the study, were excluded. Sample demographic characteristics are presented in Table 1.

Measures

Household Income

Mothers reported their annual household income using seven items. Annual household income encompassed the following monies remitted directly to the mother: 1) regular wage, salaries, and tips; 2) self-employment income; 3) Social Security; 4) pension income; 5) public assistance; 6) any other government programs; and 7) investment income (see Appendix A). These amounts were added together to create a household income variable. Financial child support was excluded as a source of household income so as to get a more accurate figure of the mother’s individual earnings or income. Descriptive statistics for this variable are presented in Table 1.

Nonresident Father-Child Relationship

Father-child contact. Because custodial mothers and nonresident fathers tend to disagree about nonresident fathers’ level of involvement (Coley & Morris, 2002), the current study utilizes the focal adolescents’ report of contact with their biological, nonresident father. Father contact was assessed using two items asking how often (*1=not at all; 6=several times a week*) in the past year the adolescent (a) had seen the father in person, and (b) had talked on

the phone or received a letter from their father (See Appendix B). The scores for these items were combined and averaged to create a total father contact score, with higher scores representing more frequent contact with nonresident fathers. Previous researchers have conducted studies with these items to represent the latent construct of father-child contact, and found that together they evidenced good construct and convergent validity (Stewart, 2003). For the current sample, the scale demonstrated good internal consistency reliability ($\alpha = .85$).

Father-child relationship quality/closeness. Focal adolescents also reported on the quality of the relationship with their nonresident fathers using six items. Two items asked how often ($1=never$; $5=almost\ every\ day$) the father praised them and criticized them. Two other items asked adolescents how likely they would be to talk to their father ($1=definitely\ wouldn't$; $5=definitely\ would$) if (a) they felt depressed or unhappy, and (b) they had a major decision to make. Adolescents also provided ratings for the global quality of the relationship with their father as well as their admiration for their father, both on an 11-point scale ($0=really\ bad$; $10=absolutely\ perfect$). For each of the latter two items, the 0 to 10 scale was converted to a 1 to 11 scale by first adding 1 to each value. The resulting value was then divided by 12, and this figure was multiplied by 5 to produce a 1 to 5 scale.

The resulting six items were then aggregated and averaged to comprise the scale, with higher scores representing a more positive father-child relationship (see Appendix C). Sobolewski and King (2005) found that all but the “criticize” item had good convergent and construct validity. However, the current study utilizes this item, as the scale had much stronger internal consistency reliability with this item ($\alpha = .81$) than without it ($\alpha = .69$).

Adolescents were also asked to assess the quality of their relationship with their mother using identical items, and this also yielded a scale with adequate internal consistency ($\alpha=.78$).

Interparental Conflict

Resident mothers reported on the conflict they had with the nonresident father by responding to six 5-point likert-type items (see Appendix D). Mothers indicated the amount of conflict they had with the adolescent's father over the following issues: 1) where the child lives, 2) how the mother spends money on the child, 3) how the father spends money on the child, 4) the time the father spends with child, and 5) the father's financial contribution to the child's support. These items were aggregated and averaged to create a total interparental conflict score, with higher scores indicating more conflict in the resident mother-nonresident father relationship. King and Heard (1999) used these items to construct the interparental conflict scale, and found that the scale predicted internalizing behaviors in younger children. In the current sample, the scale demonstrated adequate internal consistency ($\alpha=.75$).

Financial Child Support

Mothers were asked to report the annual child support payments remitted directly to her as well as support monies she received through a court order or government agency. Because some fathers also provide alternate or additional forms of financial support (e.g. "health insurance," "uninsured medical or dental expenses," "child care/education," "general expenses," etc.), mothers were asked to assign a dollar value to all non-monetary forms of support. This figure was then added to the mother-reported annual monetary support to create a single indicator of financial child support (see Appendix E). Also, the variable reflects actual support paid, regardless of whether there was a legal agreement

mandating child support. The distribution of the child support was positively skewed; a log transformation was performed to correct for skewness. Descriptive statistics on father financial child support are presented in Table 2.

Mothers also reported on their overall satisfaction with the child support that nonresident fathers provided (*reversed coded, 1=very dissatisfied, 4=very satisfied; see Appendix F*). After the primary hypotheses were tested, this item was used as an exploratory substitute for financial child support in the hypothesis testing financial support as an independent variable. Not surprisingly, maternal satisfaction with the child support provided was positively related to the amount of child support ($r=.29, p\leq.01$).

Time Since Parental Separation

Mothers reported the month and year that their relationship with the nonresident father ended. The researchers converted this date to century months, or the number of months since January 1900 (e.g., January 1900 equals one century month, January 1901 equals 13 century months, February 1901 equals 14 century months, February 2000 equals 1202 century months, etc.). For the purposes of the current study, the date the relationship ended was subtracted from the date of the interview (also reported in century months) to create the variable assessing the time since parental separation. This technique was used because participants completed interviews over the course of two years.

Adolescent Outcomes

Adolescent externalizing behavior. Mothers indicated how true each of the following eight statements was of their adolescent child in the past three months, using a 3-point scale ($1=not\ true; 3=often\ true$): 1) adolescent cheats or tells lies, 2) argues too much, 3) bullies or is cruel or mean to others, 4) is disobedient at home or school, 5) does not seem

to feel sorry after (he/she) misbehaves, 6) has trouble getting along with other children, 7) has a very strong temper and loses it easily, and 8) hangs around with kids who get into trouble (see Appendix G). The responses to these items were aggregated and averaged to create the externalizing behavior scale, with higher scores indicating that the adolescent exhibited more externalizing behavior. The items on this scale overlap with DSM-IV diagnostic criteria for Oppositional Defiant Disorder and Conduct Disorder (APA, 1994). The resulting scale had good internal consistency reliability ($\alpha=.86$).

Risky behaviors. Adolescents reported their risk behaviors in three areas: 1) sexual activity, 2) marijuana use, and 3) alcohol use. Adolescents were asked at what age, if ever, they first used marijuana and alcohol, or had sex (see Appendix H for the specific items assessing these risk taking behaviors). Those adolescents who reported having these previous experiences were coded as 1 while those who denied having these previous experiences were coded as 0 to create a binary variable. These three dichotomous items were then aggregated to comprise a cumulative risk scale, ranging from 0 (e.g., no previous risky behaviors) to 3 (e.g., previous experience with sex, alcohol, and marijuana).

Age at first sexual encounter, age at first alcohol use, and age at first marijuana use were also used as separate dependent variables to test hypotheses predicting adolescent adjustment. Descriptive statistics for these risk behaviors are presented in Table 2.

Data Analytic Strategy

Regression Analyses

Power analyses were conducted to determine the sample size necessary to detect significant findings in the regression models. These analyses indicated that, to have a 90% chance of detecting an effect size of .2 at $p \leq .05$, a minimum sample size of 93 would be

required (Cohen, 1988). Each scale was also tested to ensure acceptable internal consistency. Before testing the regression models, statistical diagnostics were conducted to ensure that the data met the assumption of regression (e.g., linearity, normality of residuals, etc.).

Descriptive statistics, including means and standard deviations, were computed for all major study variables tested in the regression models (see Table 2). Multicollinearity was also checked; none of the scales was excessively correlated with each other and there were no variables that tapped into the same construct. As such, multicollinearity was not deemed to be a significant problem.

Ordinal logistic regression was used for those hypotheses predicting cumulative risk, as these indices are not true interval/ratio scales. That is, the increase in risk from zero to one risk factor is not necessarily equivalent to the increase in risk from three to four risk factors. All other hypotheses models utilized a multiple regression model. A p-value of .05 was set for all regression models.

In all moderator models, explication of moderation effects followed procedures developed by Aiken and West (1991) as well as Preacher, Curran, and Bauer (2003). The common model used in these included the entry of any relevant covariates in the first block. The focal predictor and moderator variables were mean-centered and subsequently entered in the second and third blocks of the regression, respectively, in order to reduce multicollinearity. The interaction term was then derived by calculating the product of the centered focal and moderating variables (e.g., father contact as focal predictor and father-child relationship quality as moderator), and this value was entered into the final block of the regression equation. If the moderator was found to be significant, the interactions was probed by plotting three separate regression lines representing those participants with low

(more than 1 SD below the mean), moderate (1 SD on either side of the mean), and high (more than 1 SD above the mean) values on the moderating variable. The resulting simple slopes were then examined for their difference from zero as well as from each other.

Mediation analyses were tested following Baron and Kenny's (1986) four-step approach in which a series of three regression analyses are conducted. Any and all control variables were entered into the first block of the regression equation. Consistent with Baron and Kenny's suggestions, the first step involved regressing the independent variable on the dependent variable. In the second step, the independent variable was regressed on the mediator. The third and fourth steps were performed simultaneously, and involved regressing the mediator and independent variable on the dependent variable. Interpretation of this regression involves an examination of the association between the mediator and the dependent variable (Step 3) as well as the relationship between the independent and the dependent variables (Step 4). Determination of full versus partial mediation effects is based on whether, in the fourth step, the coefficient is significantly reduced and, if so, whether the coefficient is significantly different from zero. Assuming it has been reduced, if the coefficient is not significantly different from zero, then full mediation is proven. If it is significantly different from zero, then partial mediation is indicated.

Control Variables

The central goal of this study was to assess nonresident fathers' unique contribution to their adolescents' well-being above and beyond what could be accounted for by extraneous variables. Only those variables sharing a theoretically or statistically significant relationship to the relevant outcome variables were controlled. The statistical and theoretical rationales utilized to determine a variable's appropriateness as a control are discussed below.

The empirical literature has consistently shown that boys are more likely to exhibit externalizing behaviors than girls (Allisson & Furstenberg, 1989; Bergman & Scott, 2001). Likewise, researchers have reported that Black adolescents have higher levels of aggression and overall externalizing behavior problems than White adolescents (McLaughlin, Hilt, Nolen-Hoeksema, 2007). Finally, previous research findings suggest a strong link between the mother-child relationship and adolescent psychosocial functioning (Deater-Deckard & Dodge, 1997). As a result, scientists have repeatedly called on researchers to control for the mother-adolescent relationship when predicting youth behavioral outcomes in order to estimate the unique contributions of the nonresident father to youth outcomes. Because gender, ethnicity, and the mother-child relationship quality have consistently been linked to adolescent outcomes, they were entered as control variables in all analyses predicting adolescent externalizing and risk behaviors. Adolescent age was used as an additional control variable in regression equations predicting adolescent risk taking behaviors, as age was strongly correlated with risk outcomes at the bivariate level.

Because father-child contact typically decreases as the time since parental separation increases (King, 1994; Spruijt & Iedema, 1998), time since parental separation was entered as a control variable in the regression equations predicting father contact. Adolescent age was also entered as a control variable in those regressions predicting contact. Finally, because the quality of the mother-child relationship was strongly associated with the father-child relationship quality in the current study, the former was entered as a control variable in all regressions predicting the latter. There were no other standard control variables, but additional variables were occasionally entered as controls in specified hypotheses. These will be discussed under the specific tests below in the results section.

CHAPTER 3

RESULTS

Bivariate correlations were calculated to determine the interrelatedness of the demographic and other major study variables (see Table 3). Father contact was positively related to father-child relationship quality ($r=.58, p\leq.01$) as well as child financial support ($r=.17, p\leq.01$), but was unrelated to externalizing behaviors and risk behaviors. Father contact and time since parental cohabitation were negatively related, suggesting less frequent contact as time progressed ($r=-.29, p\leq.05$). Relatedly, time since parental cohabitation was negatively related to the father-adolescent relationship quality ($r = -.15, p\leq.05$).

Father-child relationship quality was related to several other study variables. Although father-child relationship quality was negatively related to risk taking behaviors ($r=-.17, p\leq.05$), mother-child relationship quality was negatively related to both externalizing behaviors ($r=-.31, p\leq.05$) and risk taking behaviors ($r=-.23, p\leq.05$). Adolescents who had close relationships with their nonresident fathers tended to have close relationships with their mother as well ($r=.17, p\leq.01$). Finally, adolescent age and father-child relationship quality were negatively related ($r = -.19, p\leq.05$), suggesting that older children tended to rate their relationship with their fathers as poorer than younger adolescents. This was also true of the relationship between adolescent age and mother-child relationship quality ($r=-.22, p\leq.01$).

Interparental conflict was positively related to externalizing behavior problems ($r = .12, p\leq.05$), which was positively associated with risk taking ($r=.31, p\leq.05$). Not surprisingly, adolescent age was positively related to risk taking behaviors ($r=.45, p\leq.01$).

A separate set of bivariate correlational analyses was conducted to assess the interrelatedness of interparental conflict in one area and conflict in other areas. Results indicated interrelatedness among interparental conflict about where the child lives, how the child is raised, how the mother spends money, how the father spends money, time spent with the father, and child support. That is, interparental conflict in one of the six “conflict areas” was likely to be accompanied by conflict in the other areas as well. Table 4 presents the Pearson correlation coefficients among the interparental conflict items.

Independent t-tests indicated that adolescent boys exhibited more externalizing behaviors than girls, $t(365) = -2.08, p \leq .05$ (see Table 5). Boys also tended to have earlier sexual experiences than girls, $t(86) = -4.02, p \leq .01$. No other gender differences were found for any of the other major study variables. A separate series of independent sample t-tests were conducted to assess ethnic differences across major study variables (see Table 6). Black adolescents tended to rate the quality of their relationship with their resident mothers more positively than White adolescents, $t(360) = 3.67, p \leq .01$. White adolescents exhibited more externalizing behavior problems, $t(365) = -2.62, p \leq .01$ and risk taking behaviors, $t(357) = 2.80, p \leq .01$ than Black adolescents. No other ethnic differences were found.

Hypothesis Testing

Hypothesis 1

Although father contact was not associated with externalizing behavior problems at the bivariate level, hierarchical regression analyses were conducted to examine the hypothesized interaction between frequency of contact and father-child relationship quality. Specifically, this hypothesis predicted that father contact would be negatively associated with adolescent problem behaviors when father-child-relationship quality was high, positively

related when relationship quality was low, and unrelated when relationship quality was moderate. Child gender, ethnicity, and the mother-child relationship quality were held constant in this hypothesis, as they have been found to be significantly related to externalizing behaviors in previous research as well as the current study. These variables were entered in the first block as control variables. In the second block, father contact was entered. Father-child relationship quality was entered in the third block. Finally, the father contact X father-child relationship quality interaction term was entered in the fourth block. Both father contact and father-child relationship quality were mean centered prior to creating the interaction term in order to reduce multicollinearity among variables (Baron & Kenny, 1986).

The results of the regression analysis are presented in Table 7. The control variables accounted for 29% of the variance. Mother-child relationship quality was positively associated with externalizing behavior problems ($\beta=.75$, $SE=.21$, $p\leq.01$). Boys exhibited more externalizing behavior problems than girls ($\beta=-1.16$, $SE=.34$, $p\leq.01$), and White adolescents also had higher levels of externalizing behaviors when compared to Black adolescents ($\beta=-.84$, $SE=.38$, $p\leq.01$). After entering the control variables in the model, the association between father contact and externalizing behavior problems was marginally significant ($\beta=.03$, $SE=.13$, $p=.07$), indicating that increases in father contact tended to be accompanied by increases in externalizing behaviors. Consistent with bivariate analyses, there was no significant association between father-child relationship quality and externalizing behaviors ($\beta=.14$, $SE=.20$, ns). While the increase in the amount of variance explained by adding each block of primary variables was relatively small (ΔR^2 range = .00

to .05), the interaction between father contact and father-child relationship quality was significant, ($\beta = -.28$, $SE = .13$, $p \leq .01$).

The significant interaction was probed using Aiken and West (1991) as well as Preacher, Curran, and Bauer's (2004) web-based interaction calculator. The findings yielded partial support for the hypothesis. Specifically, explication of the interaction revealed that frequency of father contact was negatively associated with externalizing behaviors when the quality of the father-child relationship was high. However, at low and moderate levels of father-child relationship quality, father contact was unrelated to externalizing behaviors (see Figure 1).

Hypothesis 1 was also tested using cumulative risk behaviors as a dependent variable. Adolescent age was highly correlated with risk behaviors at the bivariate level and was entered as an additional control variable to reduce multicollinearity in this model. As shown in Table 8, mother-child relationship quality was negatively related to cumulative risk behaviors ($\beta = -.61$, $SE = .20$, $p \leq .01$), indicating that those adolescents with more positive relationships with their mother engaged in fewer risk taking behaviors. Also, consistent with bivariate analyses, adolescent age was positively associated with cumulative risk taking ($\beta = .80$, $SE = .11$, $p \leq .01$). However, both ethnicity ($\beta = .30$, $SE = .33$, ns) and gender ($\beta = -.31$, $SE = .30$, ns) were unrelated to this outcome. Furthermore, neither frequency of father contact ($\beta = -.21$, $SE = .35$, ns) nor the quality of the father-child relationship ($\beta = -.38$, $SE = .35$, ns) were related to cumulative risk behaviors. Finally, the interaction between father contact and father-child relationship quality was not significant ($\beta = .07$, $SE = .10$, ns). Despite this, the full model was a strong predictor of cumulative risk taking ($\chi^2 = 79.53$, $p < .01$), presumably attributed to the effects of adolescent age and the mother-child relationship quality.

Hypothesis 1 was also tested using age of onset of each risky behavior as a dependent variable (see Table 9). In this analysis, both mother-child relationship quality ($\beta=.69$, $SE=.31$, $p\leq.05$) and adolescent age ($\beta=.72$, $SE=.19$, $p\leq.01$) were positively related to the adolescents' age at first sexual experience. Gender was also associated with the age at first sexual experience ($\beta=1.12$, $SE=.27$, $p\leq.01$), as boys tended to be younger than girls when they first had sex. Ethnicity was not related to the age at first sexual experience ($\beta=.19$, $SE=.38$, ns). Together, the control variables accounted for 29% percent of the variance in predicting this outcome. After taking the control variables into account, frequency of father contact was negatively associated with age at first sexual intercourse ($\beta=-.42$, $SE=.19$, $p\leq.05$). However, the quality of the father-child relationship was not significantly associated with the adolescent age at the onset of sex ($\beta=.21$, $SE=.23$, ns). The two way interaction between father contact and father-child relationship quality as a predictor of age at first sexual intercourse was significant ($\beta=-.10$, $SE=.04$, $p\leq.01$). With the addition of the interaction term in the final step of the regression model, a significant change in R^2 was found ($\Delta R^2 = .05$). Probing of this interaction showed that when relationship quality was low, the relationship between frequency of contact and the adolescent's age at first sexual intercourse was negative. When quality was high, the relationship was positive. At moderate levels of relationship quality, father contact was unrelated to the adolescent's age at first sexual experience (see Figure 2).

For age at first alcohol use, the control variables yielded an R^2 value of .39. The mother-child relationship quality was positively associated with the age at first alcohol use ($\beta=.61$, $SE=.26$, $p<.05$), as was adolescent age ($\beta=.80$, $SE=.11$, $p<.01$). However, both ethnicity ($\beta=.83$, $SE=.67$, ns) and gender ($\beta=-.02$, $SE=.41$, ns) were unrelated to the age at

first alcohol use. Neither frequency of contact ($\beta=-.58$, $SE=.45$, ns) nor quality of the father-child relationship ($\beta=-.69$, $SE=.49$, ns) predicted adolescent's age at first alcohol use. However, the interaction between father contact and father-child relationship quality approached statistical significance, ($\beta=-.24$, $SE=.13$, $p=.07$). Probing of this marginally significant interaction indicated that when father-child relationship quality was high, the association between frequency of contact and age of onset of alcohol use was positive. When father-child relationship quality was low or moderate, contact and age at first alcohol use were unrelated.

As shown in Table 9, adolescent age was the only control variable associated with the age of onset of marijuana use in the regression model ($\beta=.99$, $SE=.32$, $p<.01$). Addition of the remaining control variables (ethnicity, gender, and mother-child relationship quality) yielded an R^2 value of .28. Neither frequency of contact ($\beta=-.73$, $SE=.90$, ns) nor quality of father-child relationship ($\beta=-.33$, $SE=1.00$, ns) predicted adolescents' age at first marijuana use. In addition, the interaction between father contact and father-child relationship quality was not significant ($\beta=.28$, $SE=.30$, ns), indicating that father contact did not moderate the relationship between father-child relationship quality and the adolescent age of onset of marijuana use.

Hypothesis 2

Hierarchical regression analyses were conducted to test father contact as a mediator of the relationship between gender and father-child relationship quality, controlling for mother-child relationship quality, ethnicity, and adolescent age. These analyses indicated that gender was unrelated to father-child relationship quality ($\beta=-.12$, $SE=.11$, ns). Hence, no test of the mediating role of father contact was possible.

Hypothesis 3

Hypothesis 3 predicted that interparental conflict would mediate the relationship between financial child support and adolescent functioning, controlling for mother-child relationship quality, adolescent gender, and ethnicity. Because child support and externalizing behaviors were unrelated ($\beta=.00$, $SE=.00$, ns), no test of the mediating role of interparental conflict was possible.

The hypothesis of interparental conflict as a mediator in the relationship between child support and risky behaviors was also tested. Cumulative risk behaviors as well as the age of the onset of risky behaviors (e.g., sexual activity, alcohol use, and marijuana use) were the dependent variables in this set of analyses. For all analyses predicting risk behavior (cumulative risk and onset ages), ethnicity, adolescent age, mother-father relationship quality, and mother-child relationship quality were controlled. Regression analyses indicated that child support was unrelated to cumulative risk behaviors ($\beta=.03$, $SE=.06$, ns) and age of onset of each of the risky behaviors. Hence, no tests of interparental conflict as a mediator were possible for any of these outcomes.

For exploratory purposes, Hypothesis 3 was also tested substituting mother's satisfaction with child support for the actual child support amount. Specifically, two exploratory analyses examined interparental conflict as a potential mediator in the relationship between mother's satisfaction and 1) externalizing behaviors, and 2) cumulative risk behaviors. Control variables were the same as those used to test child support as the independent variable. Mother's satisfaction with child support was unrelated to both adolescent externalizing behaviors ($\beta=-.02$, $SE=.02$, ns) and cumulative risk behaviors ($\beta=-.11$, $SE=.10$, ns), precluding tests of the mediating role of interparental conflict.

Hypothesis 4

Hypothesis 4 predicted that interparental conflict would be negatively related to father contact. This hypothesis was tested with and without control variables (e.g., annual child support, time since parental separation, and quality of the father-child relationship). Regression analyses indicated that interparental conflict was associated with father contact, but not in the expected direction. Contrary to the hypothesis, higher levels of interparental conflict was associated with more frequent contact with the adolescent ($\beta=.34$, $SE=.11$; $F(1, 347)=9.02$, $p\leq .01$). When added as control variables, time since parent separation was negative related to father contact ($\beta=-.00$, $SE=.00$, $p\leq .05$) while father-child relationship quality was positively related ($\beta=.80$, $SE=.09$, $p\leq .01$). Neither the annual child support ($\beta=.00$, $SE=.01$, ns) nor adolescent age ($\beta=.07$, $SE=.04$, ns) were related to frequency of father contact. Together, the control variables accounted for approximately 32 percent of the variance in predicting frequency of father contact. The addition of control variables did not significantly change the direction of the relationship between interparental conflict and father ($\beta=.26$, $SE=.10$, $p<.01$; $F(5, 347)=22.60$, $p\leq .01$; see Table 10).

Hypothesis 5

It was hypothesized that father-child relationship quality would be associated with fewer externalizing behaviors and risky behaviors when interparental conflict was low, and more externalizing behaviors and risky behaviors when interparental conflict was high. In analyses predicting externalizing behaviors, child gender, ethnicity, and mother-child relationship quality were controlled. In analyses predicting risky behaviors, these three variables as well as adolescent age were controlled. In all of these analyses, interparental conflict was entered into the second block, and father-child relationship quality in the third

block. In the fourth and final block, the interparental conflict X father-child relationship quality interaction was entered. Both interparental conflict and father-child relationship quality were centered prior to creating the interaction term in order to reduce multicollinearity among variables.

As shown in see Table 11, mother-child relationship quality was the only control variable associated with externalizing behaviors in the regression model ($\beta=-.16$, $SE=.04$, $p\leq.01$). Addition of the control variables yielded a R^2 value of .10. Interparental conflict predicted significantly higher levels of adolescent externalizing behaviors ($\beta=.17$, $SE=.11$, $p\leq.01$) after entering the control variables in the regression model. However, father-child relationship quality was unrelated to externalizing behaviors ($\beta=.01$, $SE=.03$, ns). In addition, the interaction between interparental conflict and father-child relationship quality was not significant ($\beta=-.03$, $SE=.03$, ns). Although the increase in the amount of variance explained by adding each block of variables was relatively small (range = .00 to .03), the overall model was significant ($F(6, 354)=6.26$, $p\leq.01$).

This hypothesis was also tested to predict adolescent cumulative risk taking (see Tables 12). The quality of the mother-child relationship was negatively related to cumulative risk taking ($\beta=-.43$, $SE=.22$, $p<.05$), while adolescent age was positively associated ($\beta=.69$, $SE=.11$, $p\leq.01$). Neither ethnicity ($\beta=.19$, $SE=.15$, ns) nor gender ($\beta=-.03$, $SE=.13$, ns) were associated with cumulative risk behaviors as controls. With regard to this hypothesis' primary variables, both interparental conflict ($\beta=.88$, $SE=.74$, ns) and father-child relationship quality ($\beta=.04$, $SE=.21$, ns) were unrelated to cumulative risk behaviors. The interaction between interparental conflict and father-child relationship quality was also not

significant ($\beta=-.21$, $SE=.21$, ns). Despite this, the total model including all control variables was statistically significant in predicting cumulative risk taking ($\chi^2=57.44$, $p\leq.01$).

As shown in Table 13, father-child relationship was also tested as a moderator of the relationship between interparental conflict and adolescents' age of onset of the three risky behaviors (e.g., alcohol use, sexual intercourse, and marijuana use). In all these analyses, the aforementioned control variables were entered into the regression equation in the first block. When entered as control variables, mother-child relationship quality ($\beta=.64$, $SE=.25$, $p\leq.05$) and adolescent age ($\beta=.67$, $SE=.16$, $p\leq.01$) were both positively related to the age at first sexual intercourse. Also, boys tended to have sexual intercourse earlier than girls ($\beta=1.10$, $SE=.36$, $p\leq.01$), while ethnicity was not related to this outcome ($\beta=.27$, $SE=.42$, ns). Regression analyses indicated that neither interparental conflict ($\beta=-.07$, $SE=.87$, ns) nor father-child relationship quality ($\beta=.07$, $SE=.28$, ns) were related to age at first sexual intercourse. In addition, the interaction between interparental conflict and father-child relationship quality variable was not significant ($\beta=-.05$, $SE=.26$, ns). The overall model was significant ($F(7, 75)=6.72$, $p\leq.01$).

Parallel regression analyses predicting adolescents' age of onset of alcohol were also conducted. In this regression, the quality of the mother-child relationship was positively related to adolescents' age of onset of alcohol use ($\beta=.88$, $SE=.33$, $p\leq.01$), as was adolescent age ($\beta=.81$, $SE=.13$, $p\leq.01$) when entered as controls. However, neither gender ($\beta=.24$, $SE=.48$, ns) nor ethnicity ($\beta=-.98$, $SE=.65$, ns) were related. Together, these control variables accounted for a significant portion of the variance in predicting this outcome ($R^2 = .37$). Following the addition of the control variables, both interparental conflict ($\beta=-.09$, $SE=.99$, ns) and father-child relationship quality ($\beta=.23$, $SE=.34$, ns) were unrelated to age at first

alcohol use. The interaction between interparental conflict and father-child relationship quality was also not significant ($\beta=.05$, $SE=.30$, ns).

None of the control variables were statistically significant in predicting the age of onset of marijuana use, although adolescent age was marginally significant ($\beta=.60$, $SE=.33$, $p=.07$). Together, the control variables accounted for only a marginally significant proportion of the variance ($R^2=.37$). Regression analyses indicated a significant effect of interparental conflict on adolescents' age at first marijuana use ($\beta=-7.36$, $SE=3.39$, $p\leq.05$) such that higher interparental conflict was associated with an earlier onset of marijuana use. Although the main effect of father-child relationship quality was significant ($\beta=-.23$, $SE=.58$, ns), the interaction between father-child relationship quality and interparental conflict approached statistical significance ($\beta=1.89$, $SE=.98$, $p=.06$). Probing of this interaction indicated that when the father-child relationship quality was low, interparental conflict trended toward a statistically significant negative relationship with the adolescent's age at first marijuana use. At moderate and high levels of father-child relationship quality, the association between interparental conflict and age at onset of marijuana use was not significant.

Hypothesis 6

Hypothesis 6 predicted that interparental conflict would be associated with poorer adolescent adjustment when frequency of contact was high, and that this relationship would be negligible when frequency of contact was less. When testing this hypothesis for externalizing behavior, adolescent gender, ethnicity, father-child relationship quality, and mother-child relationship quality were entered as control variables given the theoretical links described earlier as well as statistical relatedness in the current study.

As shown in Table 14, the regression analysis predicting externalizing behavior indicated that only the mother-father child relationship quality was significant related to externalizing behaviors as a control variable ($\beta=-.16$, $SE=.04$, $p\leq.01$). Addition of the remaining control variables yielded an R^2 value of .10. However, neither interparental conflict ($\beta=.07$, $SE=.03$, ns) nor father contact ($\beta=-.00$, $SE=.02$, ns) were related to externalizing behavior. In addition, the interaction between interparental conflict and father contact was not significant ($\beta=.01$, $SE=.02$, ns).

For risky behaviors, adolescent ethnicity, adolescent age, and both parent-child relationship quality variables were added as controls. Results of the regression analyses predicting cumulative risk taking and the age of onset of each of the three risky behaviors are shown in Tables 15 and 16, respectively. With regard to cumulative risk, adolescent age emerged as a significant positive predictor ($\beta=.69$, $SE=.11$, $p<.01$), while ethnicity ($\beta=.47$, $SE=.35$, ns), mother-child relationship quality ($\beta=-.43$, $SE=.22$, ns) and father-child relationship quality ($\beta=-.07$, $SE=.20$, ns) were not related. Both interparental conflict ($\beta=.52$, $SE=.50$, ns) and father contact ($\beta=.03$, $SE=.16$, ns) were also unrelated to adolescent cumulative risk taking. The interaction between these two variables was not significant ($\beta=-.10$, $SE=.13$, ns).

As shown in Table 16, mother-child relationship quality and adolescent age were consistently and positively related to the age at onset of the three risk behaviors, while ethnicity and gender were not associated. Interparental conflict and frequency of father contact were also unrelated the age of onset of each risky behavior. In addition, none of the interactions between interparental conflict and frequency of father contact was statistically significant.

CHAPTER 4

DISCUSSION

It has long been thought that in both single and two-parent families, fathers' influence on youth well-being is largely overshadowed by the influence of the mother-child relationship. Past researchers have suggested that fathers are essentially replaceable forms of social capital (Stewart & Eggebeen, 1991). However, as the structure of the "typical" American family rapidly changes, the influence of the nonresident father has become a topic of increasing interest among social scientists. The extant research includes relatively few studies of nonresident fathers' role in shaping their adolescents' development. Though there is a clear need to examine how nonresident fathers impact their children's development from afar, much of the extant research is inconclusive in this regard.

The overarching goal of the study was to assess the unique influence of the nonresident father on adolescent externalizing and risk taking behaviors. Understanding this issue necessitates a broader understanding of father involvement vis-à-vis father's level of contact with the child. Another aim of the study was to examine conflict in the resident mother-nonresident father relationship as a vehicle for understanding contextual issues related to the father-child relationship as well as father contact. Finally, the study aimed to measure the effects of these variables above and beyond what could be attributed to the mother-child relationship as well as other well-documented predictors.

The Nonresident Father-Child Relationship

The nonresident father-child relationship is a multifaceted construct that encapsulates a number of unique parenting components. In this study, the nonresident father-child relationship was not as robust a predictor of adolescent functioning as hypothesized. In fact, father-child relationship quality was not a significant predictor of externalizing or risk taking behaviors in any of the regression models tested, and was only weakly associated with risk taking behaviors at the bivariate level. Many researchers have also failed to find a main effect for father-child relationship quality, suggesting that an affectively close father-child relationship is not, in and of itself, sufficient to buffer youth at risk for engaging in negative behaviors (Furstenberg & Nord, 1985; Stewart, 1999). In fact, Baumrind (1969) coined the term “permissive parent” to describe the parent who is high on parental warmth and low on parental control, and this parenting style has consistently been linked to an increased adolescent problem and risk taking behaviors.

Despite not having a main effect on adolescent functioning, father-child relationship quality did emerge as an important contextual variable. Because parenting characteristics do not exist in isolation, examining the contextual influences of these characteristic is integral to understanding the larger construct of parenting. In this study, frequency of father contact was negatively related to adolescent externalizing behaviors only when the quality of the father-child relationship was high. Otherwise, father contact was not significantly related to adolescent externalizing behaviors. That is, when frequency of contact with the father was high, but the relationship was of poor or moderate quality, adolescents were less apt to be influenced by father contact. This finding may explain some of the inconsistent findings in the current literature with regard to father contact.

Father-child relationship quality also moderated the relationship between father contact and the adolescents' age at first sexual intercourse. Specifically, when relationship quality was low, adolescents who had more contact with their fathers were more likely to initiate sexual activity earlier. When relationship quality was high, more contact predicted a later age of onset. However, when both contact and relationship quality was low, adolescents were more likely to have sex later than when the relationship quality was low but frequency of contact was high. This suggests that more contact with the father may actually be a risk factor if the relationship is poor. However, these results should be interpreted with caution, as this analysis was based on a small subset of the larger dataset and external validity is questionable.

The low relationship quality-high contact problem may resolve itself in many cases. First, the current study found that contact was negatively related to the amount of time that had passed since the parents separated, such that fathers spent less time with their children as time progressed. If an adolescent's parents dissolved their intimate relationship some time ago, the tendency for nonresident fathers to have less contact with children may actually act a buffer against early onset of sexual intercourse. Second, during adolescence, children begin to have more legal influence over where they will spend their time. As such, for those cases where the relationship between the adolescent and the father is poor, legal authority might allow for adolescents to choose whether to spend less time with their fathers, thereby reducing their risk for early sexual behavior. Again, these results should be interpreted with caution, but the potential for this to be a viable pathway should be considered.

That this interaction was not significant for any other risk behavior may be noteworthy. Alcohol and marijuana use are qualitatively different from sexual intercourse in

that sexual behavior is inherently interpersonal. Most would assert that the majority of youth initially desire a close relationship with both parents. If the relationship with the father is poor and there is more contact, adolescents may be more likely to seek out their dependence needs in other people; intimate relationships provide an optimal vehicle for meeting those needs. This is particularly true for adolescents, who are heavily influenced by societal norms and hormonal changes that function to guide sexual behavior. The implications of the father contact X father-child relationship quality interaction in predicting the onset of sexual, but not other risky, behaviors may be a strong indication that fathers play an important role in specifically shaping their children's sexual or interpersonal behaviors.

The above finding also sheds light on another important component of the nonresident father-child relationship, namely father contact. Many of the studies in the paternal involvement literature suggest that fathers tend to be less involved and engaged as their children get older, and this is especially true for girls (Cooney, 1994; Spruijt & Iedema, 1998). The bivariate analyses showed no relationship between adolescent age and father contact. However, given the time since parental separation-father contact link found here, the father involvement-age relationship may be a phenomenon specific to resident fathers and their children, while the time since parental separation may be a more accurate predictor of contact than age for the nonresident father-child dyad. This distinction has not been made in the current literature, but it may merit further discussion and attention as scholars call for the development of research that conceptualizes nonresident father involvement as a unique process that differs significantly from resident father involvement.

Father contact was not a robust predictor of adolescent externalizing and risk taking behaviors. This is not surprising given that the relationship between father contact and

externalizing behaviors has been shown to be positive, negative, and insignificant across numerous studies (Amato & Gilbreth, 1993). The relationship between nonresident father contact and risk behaviors has been studied much less. However, the insignificant effect of contact on these outcomes might be explained by parental monitoring. That is, more frequent father contact is not necessarily associated with parental monitoring, a parenting technique that has been closely linked to adolescent risk behavior. In fact, past research has indicated that children whose parents are ineffective monitors are more likely to engage in risk behaviors (Han & Waldfogel, 2007). Stewart (1999) also noted that nonresident fathers do not engage in meaningful, authoritative activities with their children, and this may be the case regardless of the frequency of contact. The current study did not measure parental monitoring and was therefore unable to test this association.

Frequency of father contact was positively associated with the quality of the father-child relationship. That is, fathers who had more contact with their adolescents also evidenced stronger, more positive relationships with them. Many researchers believe that a father's contact with their child is a weak proxy for the overall relationship. Studies conducted by Furstenburg and Nord (1985) as well as Silverstein and Bengtson (1997) indicated that there was only a weak association, if any, between father contact and the father-child relationship. However, in the present study, contrary to past research, fathers who spent more time with their children also had better relationships with them.

Interparental Conflict

Another important contextual factor of nonresident fathering is the nonresident father-resident mother relationship, as custodial mothers have the potential to impede or facilitate the development of a strong, healthy father-child relationship. One of this study's strengths

is its focus on interparental conflict in a sample of adolescents with nonresident fathers. It may be important to distinguish parent conflict in a co-residing relationship from parent conflict in a resident mother-nonresident father relationship, as the current literature is not clear about how these two differ from each other.

The level of interparental conflict in the current sample was low. Nevertheless, bivariate analyses suggested that interparental conflict between the resident mother and nonresident father was generally not restricted to disagreements in only one area. That is, feuding parents tended to have conflict across many areas of childrearing. The current findings also suggest that interparental conflict may engender adolescent externalizing behaviors. This is consistent with prior research, which has found that interparental conflict is related to adolescent externalizing behavior problems (Buehler & Gerard, 2002; Harold, Shelton, Goeke-Morey, & Cummings, 2004). However, in the present study, no relationship was found between interparental conflict and risk taking behaviors.

Little attention has been paid to how interparental conflict impacts the nonresident father-child relationship. The current study yielded interesting findings in this regard. First, although only tested at the bivariate level, interparental conflict was not related to father-child relationship quality. This is important, as it suggests that the relationship between the nonresident father and the child may be less vulnerable to damage in the face of high interparental conflict. Although increased interparental conflict is associated with negative adolescent behaviors, maintenance of the father-child relationship may be a protective factor over the long term. As such, even in those cases where the mother-father relationship is highly conflictual, the father and child's relationship may not suffer significantly.

Contrary to prediction, I found that frequency of father contact and interparental conflict were positively related. I predicted a negative relationship between these two variables based on the idea that fathers would decrease contact with adolescents if their interactions with the mother were unpleasant. There are several plausible explanations for this unexpected finding. First, if there is already tension in the mother-father dyadic relationship, increased father contact with the adolescent also amounts to increased contact with the resident mother, and this may exacerbate the already existing conflict or tension between them. Unfortunately, the correlational design of the study did not permit an assessment of the directionality of this relationship.

Increased father contact with the nonresident adolescent also provides the father with more information about the specific activities of the child as well as the resident mother. This level of knowledge may cause fathers to provoke more arguments with the mother over her childrearing practices, leading to increased conflict. Furthermore, fathers who are intimately involved with their children may desire more decision-making power, and this may be met with resistance and conflict from the mother.

In addition, research has shown that non-cohabiting custodial parents often engage in gate-keeping behaviors, and are also more likely than feuding cohabiting parents to make disparaging comments about the other parent in the presence of the child (Doherty, Kouneski, & Erickson, 1998). This may be especially true when there is high conflict in the mother-father relationship. As such, another explanation for the unexpected finding is that, in the face of high conflict with the mother, fathers may purposefully increase contact with their children in an attempt to offset negative messages that mothers may be sending.

Increasing contact with their children may be fathers' way of encouraging their children to form their own impression independent of what the resident mother might say.

Increased interparental conflict was associated with externalizing behaviors at the bivariate level, but not in any of the regression models tested. Conflict was also associated with an earlier onset age of marijuana use in only one of the regressions tested. However, because this was the only significant risk factor that was significantly related to interparental conflict, this finding should be interpreted with caution.

The Resident Mother-Child Relationship

Because of the limited scope of the current study, the mother-child relationship quality was not the focus of any of the primary hypotheses. However, mother-child relationship quality was consistently related to adolescent outcomes when included as a control variable. This is consistent with previous findings indicating that the mother-child relationship is a robust predictor of youth outcomes, adding merit to researchers' call to control for it in order to provide a more accurate assessment of the unique contribution of nonresident father involvement to youth functioning.

Limitations of the Current Study

There are several limitations that should be noted. First, the current study did not examine the kinds of activities fathers engaged in with their children. Researchers have suggested that nonresident fathers tend to engage in "Disneyland" activities with their children, but we are not certain about this. It is possible that some nonresident fathers engage in "Disneyland" activities while simultaneously employing effective authoritative parenting practices. Understanding more about specific activities that nonresident fathers and their children engage in during visits may be important when examining how nonresident fathers

influence their adolescent's development. Furthermore, this may shed additional light on the qualitative differences between resident and nonresident fathers. Unfortunately, the methodology of the proposed study did not permit such analyses.

The current study also did not assess fathers' behaviors on similar dimensions as adolescents (e.g., externalizing and risk taking behaviors). Social learning theorists believe that children emulate the behaviors of their parents, both negative and positive. One might argue that adolescents who engage in externalizing and risk taking behaviors have learned this behavior from their fathers. This might be particularly relevant in high contact, close nonresident father-child dyads. Whether the intergenerational transmission of negative behaviors is as strong for nonresident fathers as it is for resident fathers is unknown. Therefore, future research should consider examining how nonresident fathers' psychosocial behaviors are related to those of their adolescent children, especially in the context of high father contact.

Another limitation of this study is that group differences in the hypothesized relations were not examined, particularly with regard to gender and ethnicity. Because it has consistently been shown that boys are at increased risk for developing externalizing behavior problems than girls, it may be that nonresident father characteristics function differently across the two groups. Furthermore, Draper and Harpending's (1982) father-absence theory suggests that females benefit greatly from their father's presence, as they proposed that fathers model appropriate paternal investment and emotional responsiveness to females. They argued that when fathers leave the household, daughters' risk for increased sexual permissiveness, unstable relationships and promiscuity increases substantially. Because this is a phenomenon that is apparently specific to girls, the impact of nonresident father

involvement on adolescent functioning may vary by gender. As such, researchers should examine how nonresident fathering impacts child development as a function of adolescent gender.

With regard to ethnicity, Black adolescents in the present study had stronger relationships with their mothers than White adolescents. Stronger mother-child relationships may facilitate or impede the development of a healthy nonresident father-child relationship and, in turn, adolescent functioning. As such, it seems reasonable to examine the impact of ethnicity on nonresident father involvement and characteristics and, in turn, adolescent functioning.

Finally, this study did not examine the relationship between father involvement and adolescent outcomes longitudinally. Stewart (1999) suggested that although research has historically conceptualized parental involvement as a predictor of adolescent functioning, there is evidence that the relationship is transactional, or even in the opposite direction. A longitudinal investigation may better explain the unexpected positive relationship between interparental conflict and father contact found in the current study. Furthermore, a longitudinal design would permit stronger inferences about the nature of the nonresident fathering processes observed in this study.

Directions for Future Research

The lack of consistent findings in the nonresident father literature is problematic and, unfortunately, the current study adds to the confusion in this regard. Still, there is much to be learned about how nonresident fathers impact their adolescents' psychosocial adjustment, and the current study was not designed to capture all of the important dimensions of nonresident fathering. The current study reinforces the ideas that the nonresident father-

adolescent relationship needs to be conceptualized more holistically. Specifically, careful consideration should continue to be given to the various components that comprise the overall relationship including, but not limited to, nonresident father contact and activities, father-child relationship quality, parenting techniques, and interparental conflict, as the impact of these components on adolescent functioning may vary as a function of each other.

Despite its adequate psychometric properties, the cumulative risk behavior scale was largely unrelated to the predictor variables in the current study. It may be that nonresident father involvement is predictive of more specific risk behaviors and the cumulative risk scale utilized in the current study may have obscured these relationships by combining sexual intercourse with alcohol and marijuana use in one scale. Although these behaviors share many of the same risk factors (Rosenbaum & Kandel, 1990), sexual behaviors are qualitatively different from substance use behaviors in that they inherently involve another person who is fulfilling an unmet intimacy need. As such, future researchers may wish to carefully consider the pathogenic process toward different risky behaviors when creating broad cumulative risk scales.

The current study did not utilize a multi-method, multi-informant design, which raises concerns about shared method variance and reporter biases. Future research studies should utilize a design with multiple reporters and multiple methods in order to increase the confidence in study findings. Relatedly, past researches have suggested that parents and their children tend to differ in their appraisal of the child's behavior (Goodyer, 1990). Because of these disparities, more objective measures of youth adjustment such as legal and arrest histories, truancy records, and general school performance may prove valuable.

In addition, researchers should consider conducting subgroup analyses to determine whether nonresident fathering functions differently for boys versus girls. This would be particularly interesting given that researchers have suggested that there are qualitative and quantitative differences between the father-son and father-daughter relationships, and these differences may function to uniquely impact adolescent male and female development (Russell & Saebel, 1997; Scharf & Mayseless, 2008).

The current study's finding that father-child relationship quality moderated the relationship between frequency of father contact and age of onset of sexual activity is interesting in that it suggests that nonresident fathering may be related to intimate relations, an interpersonal (as opposed to more recreational) risk behavior. Few researchers have examined how the nonresident father impacts how children manage their social relationships, platonic and intimate. Current research suggests that mothers play a large role in children's internalization and understanding of social values and relationships. Future researchers may wish to examine nonresident fathering characteristics and practices as they relate to children's navigation of important social relationships.

Black adolescents in the present study had better relationships with their mothers than White adolescents. This is an important consideration, particularly given Goldstein, Freud, and Solnit's (1979) "loyalty complex" theory. That is, compared to White adolescents, Black adolescents may feel more pressure to choose sides because they are generally closer to their mothers. This may be exacerbated when adolescents tend to have better relationships with their mothers than their fathers. Furthermore, the loyalty complex has been found to significantly negatively impact the adolescent's relationship with both parents, which, in turn, negatively affects their functioning.

In order to clarify differences between resident and nonresident fathering, future researcher should also consider examining fathers' parenting practices as a function of their resident status. The same father involvement variables tested here have not been tested using resident status as a moderator. Again, there is a need to understand how the same processes function differently across resident and nonresident father groups.

Research on financial child support suggests that the relationship between support and youth adjustment may be mediated by maternal satisfaction and stress (e.g., Breitzkreuz & Williamson, 2006; Cook, Davis, and Davies, 2008; McLanahan et. al., 1994). Unfortunately, no maternal stress variable was available for the current study. Maternal satisfaction with financial child support received from the father, used as a proxy for maternal stress, was negatively associated with interparental conflict. Interparental conflict did not mediate the relationship between maternal satisfaction and adolescent outcomes – a result driven by failure of maternal satisfaction to predict adolescent outcomes. A more psychometrically sound instrument measuring maternal stress may prove to be more fruitful in future research.

Table 1. Demographic Characteristics of Sample

Demographic	N (%)	Mean (SD)	Observed Range
Child Age	372	13.91 (2.17)	10-17
Ethnicity			
Black	113 (3.6)		
White	258 (69.4)		
Gender			
Boys	196 (52.7)		
Girls	176 (47.3)		
Household Income		\$17,537 (\$16,201)	\$0 - \$144,000
≤ \$20,000	243 (65.3)		\$0 - \$20,000
\$20,001 - \$40,000	105 (28.2)		\$20,385 - \$40,000
\$40,001 – \$60,000	21 (5.6)		\$40,400 - \$58,000
\$60,000+	3 (.8)		\$88,000 - \$144,000
Parent Relationship Status			
Cohabiting with boyfriend	0 (0)		
Boyfriend, not cohabiting	165 (44.3)		
Engaged, not cohabiting	13 (3.5)		
No relationship/Casually dating	194 (52.2)		

Table 2. Descriptive Statistics for Primary and Control Variables

Variable	N (%)	Mean (SD)	Observed Range
Financial Child Support ¹	372	\$2,373 (\$5,358)	\$0 - \$28,800
Parent-Child Relationship			
Father-Child Relationship Quality	370	3.54 (.956)	1-5
Mother-Child Relationship Quality	358	4.075 (.706)	1-5
Nonresident Father Contact	370	3.64 (1.65)	1-6
Interparental Conflict	364	.66 (.80)	0-4
Time Since Parental Separation (in century months)	371	106.7 (46.8)	0-215
Adolescent Behavior			
Externalizing Behavior Problems		1.46 (.40)	1-2.78
Risk Taking Behavior		.95 (1.01)	0-3
Age at first alcoholic beverage	118 (31.7)	12.89 (2.49)	6-17
Age at first sexual experience	88 (23.7)	14.22 (1.65)	10-17
Age at first marijuana use	35 (9.4)	13.97 (2.01)	7-17

¹ Nonresident fathers in the current sample paid less in child support payments (M=\$2,373) than the national average estimates of child support payments by noncustodial fathers (M=\$4,990) during that time (U.S. Census Bureau, 1993).

Table 3. Bivariate Correlations Between Study Variables

Variable	1	2	3	4	5	6	7	8	9	10	11	12
1. Adolescent Age	—	.02	.12*	.07	.01	.23**	-.03	-.19**	-.22**	.02	.04	.45**
2. Child Gender		—	.00	.04	.07	-.04	-.06	-.07	.06	.04	-.11*	-.06
3. Ethnicity			—	.04	.14*	.16*	.08	.02	-.19**	.03	.14**	.18**
4. Household Income				—	.11*	.00	.10	.03	.00	-.12*	-.10	-.06
5. Child Support					—	-.02	.17**	.08	-.10	-.10	.05	.04
6. Parents Last Cohabited						—	-.29*	-.15*	-.13*	-.17*	.06	.02
7. Father Contact							—	.58**	.09	.17**	-.06	.01
8. Father-Child Relationship								—	.17**	-.01	-.06	-.17*
9. Mother-Child Relationship									—	.05	-.31**	-.23**
10. Interparental Conflict										—	.12*	.08
11. Externalizing Behs											—	.31**
12. Risk Behaviors												—

* p≤.05, ** p≤.01

Table 4. Interrelatedness among Interparental Conflict Types

Conflict about:	1	2	3	4	5	6
1. Where child lives	—	.57**	.49**	.23**	.14*	.28**
2. How child raised		—	.64**	.26**	.19**	.24**
3. Money spent by mother			—	.35**	.19**	.22**
4. Money spent by father				—	.50**	.53**
5. Time spent with child					—	.47**
6. Financial support						—

* $p \leq .05$ ** $p \leq .01$

Table 5. T statistics for Primary Study Variables (by Gender)

Variable	Boys	Girls	<i>t</i>	<i>df</i>	<i>p</i>
	M (SD)	M (SD)			
Parent-Child Relationship					
Father-child relationship quality	3.60 (.87)	3.48 (1.02)	1.18	357	.24
Mother-child relationship quality	4.02 (.69)	4.12 (.72)	-1.21	360	.23
Nonresident father-child contact	3.74 (1.60)	3.55 (1.00)	1.11	366	.27
Interparental Conflict					
	.62 (.76)	.70 (.83)	-.77	361	.44
Adolescent Behavior					
Externalizing behavior problems	1.50 (.48)	1.41 (.36)	2.08	365	.04*
Risk taking behavior	1.05 (1.04)	.86 (.98)	1.40	350	.16
Age at first sexual experience	13.58 (1.61)	14.88 (1.42)	-4.02	86	.00*
Age at first alcoholic beverage	12.75 (2.74)	13.05 (2.16)	-.67	116	.50
Age at first marijuana use	14.10 (1.62)	13.80 (2.48)	.43	33	.67

Table 6. T statistics for Primary Study Variables (by Ethnicity)

Variable	Black	White	<i>t</i>	<i>df</i>	<i>p</i>
	M (SD)	M (SD)			
Parent-Child Relationship					
Father-child relationship quality	3.51 (.95)	3.54 (.96)	-.27	351	.79
Mother-child relationship quality	4.27 (.56)	3.98 (.74)	3.67	360	.00*
Nonresident father-child contact	3.45 (1.57)	3.72 (1.68)	-1.45	366	.15
Interparental Conflict	.64 (.84)	.68 (.77)	-.44	359	.66
Adolescent Behavior					
Externalizing behavior problems	1.37 (.32)	1.49 (.43)	-2.62	365	.01*
Risk taking behaviors	.72 (.82)	1.04 (1.07)	-2.13	357	.03*
Age at first sexual experience	13.82 (1.49)	14.40 (1.70)	-1.51	86	.13
Age at first alcoholic beverage	13.21 (2.17)	12.81 (2.56)	.71	116	.48
Age at first marijuana use	13.25 (2.50)	14.06 (1.97)	-.76	33	.45

Table 7. Multiple Regression Examining the Moderating Role of Father-Child Relationship Quality on the Relationship Between Father Contact and Adolescent Externalizing Behaviors

	Externalizing Behavior			
	F	ΔR^2	B (SE)	t
Block 1: <u>Control Variables</u>	9.42**	.29**		
Mother-Child Relationship Quality			.75 (.21)**	3.47
Ethnicity			-.84 (.38) **	-2.21
Gender			-1.16 (.34)**	-3.45
Block 2: Father Contact	7.00**	.00	.03 (.13)^	.24
Block 3: Father-Child Relationship Quality	5.65**	.01	.14 (.20)	.70
Block 4: Father Contact * Father-Child Relationship Quality	5.81**	.05*	-.28 (.13)**	-2.24

*p ≤ .05 **p ≤ .01 ^ p= .051 – 1.0

Table 8. Ordinal Logistic Regression Examining the Moderating Role of Father-Child Relationship Quality on the Relationship Between Father Contact and Adolescent Cumulative Risk Taking

	Cumulative Risk Taking		
	Full Model Chi-Square	B (SE)	Odds Ratio
<u>Control Variables</u>	79.53**		
Mother-Child Relationship Quality		-.61 (.20)**	.54
Ethnicity		.30 (.33)	1.34
Gender		-.31 (.30)	.73
Age		.80 (.11)**	2.23
<u>Primary Variables</u>			
Father Contact		-.21 (.35)	.80
Father-Child Relationship Quality		-.38 (.35)	.68
Father Contact * Father-Child Relationship Quality		.07 (.10)	1.05

*p ≤ .05 **p ≤ .01

Table 9. Multiple Hierarchical Regression Examining the Moderating Role of Father-Child Relationship Quality on the Relationship Between Father Contact and Adolescent Risk Taking Behaviors

Age at First Sexual Experience				
	F	ΔR^2	B (SE)	t
Block 1: <u>Control Variables</u>	9.42**	.29**		
Mother-Child Relationship Quality			.69 (.31)*	2.22
Ethnicity			.19 (.38)	.50
Gender			1.12 (.27)**	4.15
Age			.72 (.19)**	3.79
Block 2: Father Contact	7.01**	.00	-.42 (.19)*	-2.21
Block 3: Father-Child Relationship Quality	6.32**	.01	.21 (.23)	.91
Block 4: Father Contact * Father-Child Relationship Quality	8.54**	.05	-.10 (.04)**	-2.50
Age at First Alcoholic Drink				
	F	ΔR^2	B (SE)	t
Block 1: <u>Control Variables</u>	15.18**	.39**		
Mother-Child Relationship Quality			.61 (.26)*	2.33
Ethnicity			.83 (.67)	1.57
Gender			-.02 (.41)	-.04
Age			.80 (.11)**	7.50
Block 2: Father Contact	12.96**	.02^	-.58 (.45)	-1.31
Block 3: Father-Child Relationship Quality	10.72**	.00	-.69 (.49)	-1.41
Block 4: Father Contact * Father-Child Relationship Quality	9.920**	.02^	-.24 (.13)^	1.85
Age at First Marijuana Use				
	F	ΔR^2	B (SE)	t
Block 1: <u>Control Variables</u>	2.27^	.28		
Mother-Child Relationship Quality			-.42 (.49)	-.06
Ethnicity			1.90 (1.42)	-.87
Gender			-.08 (.76)	1.34
Age			.99 (.32)**	3.10
Block 2: Father Contact	1.97	.03	-.73 (.90)	-.82
Block 3: Father-Child Relationship Quality	1.97	.05	-.33 (1.00)	-.33
Block 4: Father Contact * Father-Child Relationship Quality	1.80	.03	.28 (.30)	.93

*p ≤ .05 **p ≤ .01 ^ p = .051 – 1.0

Table 10. Multiple Regression Examining the Relationship Between Interparental Conflict and Frequency of Father Contact

	Father Contact			
	F	ΔR^2	B (SE)	t
Block 1: <u>Control Variables</u>	25.76 **	.32		
Time Since Parental Separation			-.00 (.00)*	-2.39
Annual Child Support			.00 (.00)	1.72
Father-Child Relationship Quality			.80 (.09)**	9.27
Age			.07 (.04)	1.87
Block 2: Interparental Conflict	22.60 **	.02**	.26 (.10)**	2.67

*p ≤ .05 **p ≤ .01

Table 11. Multiple Regression Examining the Moderating Role of Father-Child Relationship Quality on the Relationship Between Interparental Conflict and Adolescent Externalizing Behaviors

	Externalizing Behavior			
	F	ΔR^2	B (SE)	t
Block 1: <u>Control Variables</u>	9.58**	.10**		
Mother-Child Relationship Quality			-.16 (.04)**	-4.76
Ethnicity			.08 (.05)	1.64
Gender			-.06 (.05)	-1.39
Block 2: Interparental Conflict	9.25**	.03**	.17 (.11)**	1.53
Block 3: Father-Child Relationship Quality	7.38**	.00	.01 (.03)	.44
Block 4: Interparental Conflict * Father-Child Relationship Quality	6.26**	.00	-.03 (.03)	-.85

*p ≤ .05 **p ≤ .01

Table 12. Ordinal Logistic Regression Examining the Moderating Role of Father-Child Relationship Quality on the Relationship Between Interparental Conflict and Adolescent Cumulative Risk Taking

	Cumulative Risk Taking		
	Full Model Chi-Square	B (SE)	Odds Ratio
<u>Control Variables</u>	57.44**		
Mother-Child Relationship Quality		-.43 (.22) *	.65
Ethnicity		.19 (.15)	1.21
Gender		-.03 (.13)	1.03
Age		.69 (.11) **	1.99
<u>Primary Variables</u>			
Interparental Conflict		.88 (.74)	2.40
Father-Child Relationship Quality		.04 (.21)	1.04
Interparental Conflict * Father-Child Relationship Quality		-.21 (.21)	.81

*p ≤ .05 **p ≤ .01

Table 13. Multiple Regression Examining the Moderating Role of Father-Child Relationship Quality on the Relationship Between Interparental Conflict and Adolescent Risk Taking Behaviors

		Age at First Sexual Experience			
		F	ΔR^2	B (SE)	t
Block 1: <u>Control Variables</u>		11.98**	.47**		
	Mother-Child Relationship Quality			.64 (.25)*	2.50
	Ethnicity			.27 (.42)	.65
	Gender			1.10 (.36)**	3.02
	Age			.67 (.16)**	4.24
Block 2: Interparental Conflict		9.76**	.01	-.07 (.87)	-.09
Block 3: Father-Child Relationship Quality		7.99**	.00	.07 (.28)	.26
Block 4: Interparental Conflict * Father-Child Relationship Quality		6.72**	.00	-.05 (.26)	-.18

		Age at First Alcoholic Drink			
		F	ΔR^2	B (SE)	t
Block 1: <u>Control Variables</u>		11.57**	.37**		
	Mother-Child Relationship Quality			.88 (.33)**	2.69
	Ethnicity			-.98 (.65)	-1.49
	Gender			.24 (.48)	.50
	Age			.81 (.13)**	6.26
Block 2: Interparental Conflict		9.14**	.00	-.09 (.99)	-.09
Block 3: Father-Child Relationship Quality		7.82**	.01	.23 (.34)	.68
Block 4: Interparental Conflict * Father-Child Relationship Quality		6.62**	.00	.05 (.30)	.15

		Age at First Marijuana Use			
		F	ΔR^2	B (SE)	t
Block 1: <u>Control Variables</u>		2.48^	.37^		
	Mother-Child Relationship Quality			-.07 (.47)	-.14
	Ethnicity			-1.41 (1.33)	-1.06
	Gender			-1.20 (.93)	-1.29
	Age			.60 (.33)^	1.83
Block 2: Interparental Conflict		2.19	.04	-7.36 (3.39)*	-2.17
Block 3: Father-Child Relationship Quality		2.35 ^	.08	-.23 (.58)	-.39
Block 4: Interparental Conflict * Father-Child Relationship Quality		2.91*	.11	1.89 (.98)^	1.93

* $p \leq .05$ ** $p \leq .01$ ^ $p = .051 - 1.0$

Table 14. Multiple Regression Examining the Moderating Role of Frequency of Father Contact on the Relationship Between Interparental Conflict and Adolescent Externalizing Behaviors

	Externalizing Behaviors			
	F	ΔR^2	B (SE)	t
Block 1: <u>Control Variables</u>	7.07**	.10**		
Gender			.06 (.05)	1.38
Ethnicity			-.08 (.05)	-1.71
Mother-Child Relationship Quality			-.16 (.04)**	-4.69
Father-Child Relationship Quality			.00 (.03)	.08
Block 2: Interparental Conflict	7.23**	.02	.07 (.03)	2.49
Block 3: Father Contact	6.02**	.00	-.00 (.02)	-.23
Block 4: Interparental Conflict * Father Contact	5.18**	.01	.01 (.02)	.52

* $p \leq .05$ ** $p \leq .01$

Table 15. Ordinal Logistic Regression Examining the Moderating Role of Father Contact on the Relationship Between Interparental Conflict and Adolescent Cumulative Risk

Taking

	Cumulative Risk Taking		
	Full Model Chi-Square	B (SE)	Odds Ratio
<u>Control Variables</u>	59.45**		
Ethnicity		.47 (.35)	1.60
Age		.69 (.11)**	2.00
Mother-Child Relationship Quality		-.43 (.22)	0.65
Father-Child Relationship Quality		-.07 (.20)	0.93
<u>Primary Variables</u>			
Interparental Conflict		.52 (.50)	1.67
Father Contact		.03 (.16)	1.02
Interparental Conflict * Father Contact		-.10 (.13)	0.91

*p ≤ .05 **p ≤ .01

Table 16. Regression Examining the Moderating Role of Father Contact on the Relationship Between Interparental Conflict and Adolescent Risk Taking Behaviors

Age at First Sexual Experience				
	F	ΔR^2	B (SE)	t
Block 1: <u>Control Variables</u>	8.18**	.38**		
Ethnicity			.42 (.46)	.93
Age			.69 (.17)**	4.11
Mother-Child Relationship Quality			.71 (.29)*	2.46
Father-Child Relationship Quality			.01 (.23)	.03
Block 2: Interparental Conflict	6.68**	.01	.12 (.67)	.18
Block 3: Father Contact	5.70**	.01	-.04 (.25)	-.14
Block 4: Interparental Conflict * Father Contact	4.87**	.00	-.11 (.19)	-.57
Age at First Alcoholic Drink				
	F	ΔR^2	B (SE)	t
Block 1: <u>Control Variables</u>	11.92**	.38**		
Ethnicity			-1.07 (.66)	-1.62
Age			.79 (.13)**	6.18
Mother-Child Relationship Quality			.78 (.33)*	2.35
Father-Child Relationship Quality			.11 (.30)	.35
Block 2: Interparental Conflict	9.43**	.00	.64 (.76)	.834
Block 3: Father Contact	7.89**	.00	.29 (.26)	1.11
Block 4: Interparental Conflict * Father Contact	6.85**	.01	-.18 (.20)	-.87
Age at First Marijuana Use				
	F	ΔR^2	B (SE)	t
Block 1: <u>Control Variables</u>	3.37*	.44*		
Ethnicity			1.3 (.17)	-80
Age			.31 (.53) *	2.61
Mother-Child Relationship Quality			.55 (.07)**	-.32
Father-Child Relationship Quality			.45 (.28)	1.37
Block 2: Interparental Conflict	2.70 ^	.016	2.88 (.97)	-1.67
Block 3: Father Contact	2.19	.009	.51 (.25)	-.74
Block 4: Interparental Conflict * Father Contact	2.34	.072	.68 (1.01)	1.47

* $p \leq .05$ ** $p \leq .01$ ^ $p = .051 - 1.0$

Figure 1. The Moderating Role of Father-Child Relationship Quality on the Relationship between Father Contact and Adolescent Externalizing Behaviors

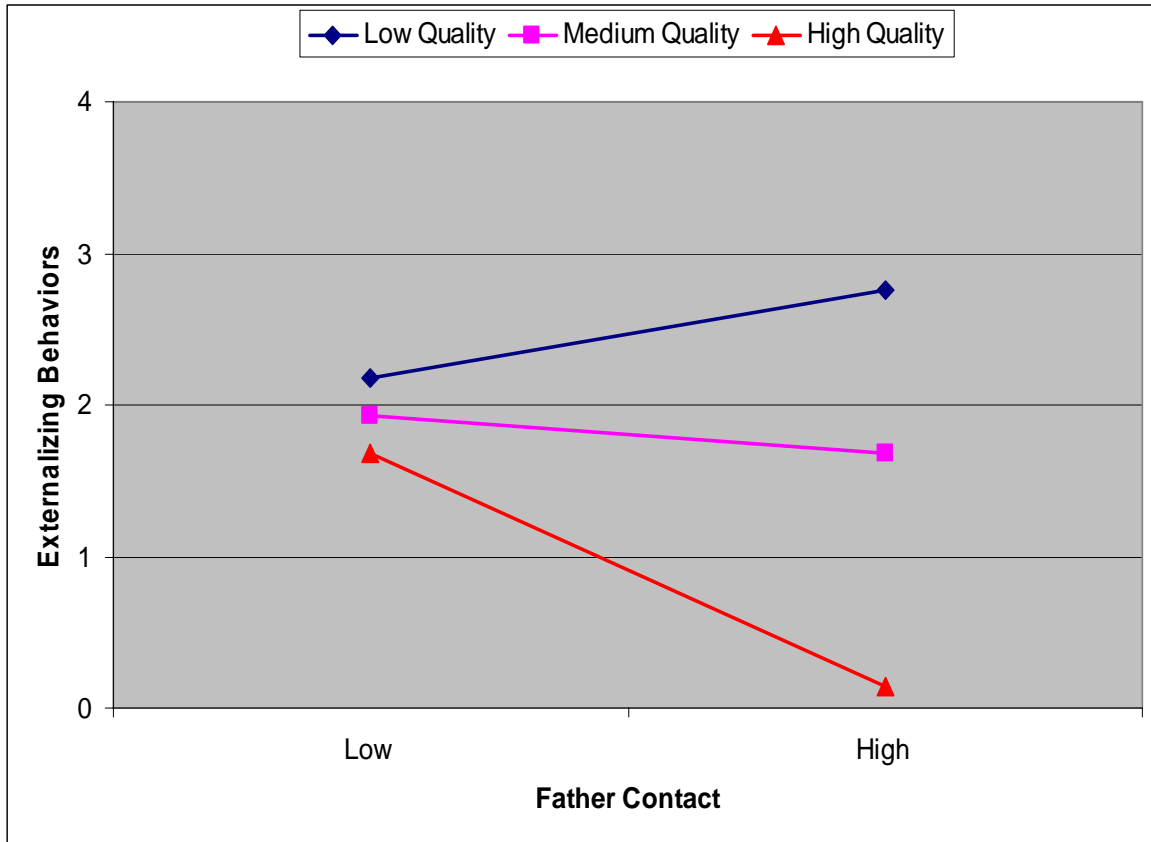
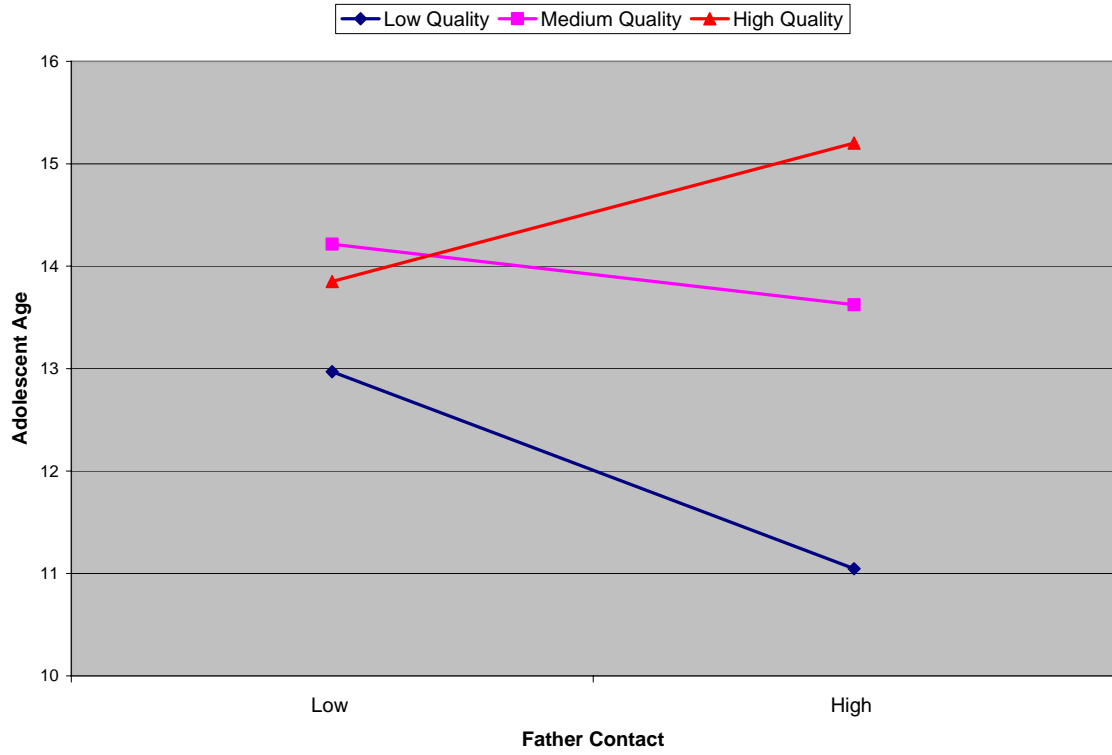


Figure 2. The Moderating Role of Father-Child Relationship Quality on the Relationship between Father Contact and Age at First Sexual Experience



Appendix A

Household Income

1. About how much income from wages, salaries, commissions, and tips did you receive in the last 12 months, before taxes and other deductions?
2. What was the total net income you received in the last 12 months from self-employment in your own business or farm, after all expenses but before taxes and other deductions?
3. What was the total amount of Social Security or Retirement Income that you received in the last 12 months?
4. What was the total amount of other pension income that you received in the last 12 months?
5. What was the total amount of public assistance income that you received in the last 12 months?
6. What was the total amount of income from other government programs?
7. What was the total amount of income from interest, dividends, rent, or other investments that you received in the last 12 months?

Appendix B

Nonresident Father-Child Contact

1. During the last year, about how often did you talk on the telephone or receive a letter from him?
2. During the last year, how often did you see your father in person?
 - 1 Not at all
 - 2 About once a year
 - 3 Several times a year
 - 4 1-3 times a month
 - 5 About once a week
 - 6 Several times a week

Appendix C

Nonresident Father-Child Relationship Quality (also, Resident Mother-Child Relationship Quality)

1. When you feel depressed or unhappy, how often do you talk to your (father/mother)?
(*reversed*)
2. When you have major decisions to make, how often do you talk to your
(father/mother)? (*reversed*)
 - 1 definitely wouldn't
 - 2 probably wouldn't
 - 3 about a 50-50 chance
 - 4 probably would, or
 - 5 definitely would?
3. How often does your (father/mother) criticize you? (*reversed*)
4. How often does your (father/mother) praise you or give you a compliment?
 - 1 almost every day
 - 2 several times a week
 - 3 about once a week
 - 4 less than once a week, or
 - 5 never
5. Taking all things together, on a scale from 0 to 10, where 0 is really bad and 10 is absolutely perfect, how would you describe your relationship with your (father/mother)?
6. On a scale from 0 to 10 where 0 is very unhappy and 10 is very happy, how happy are you with (child)'s (father/mother) as a parent?

Appendix D

Interparental Conflict

I'm going to read you a list of issues that you and (child)'s father may have conflict over. For each one, please tell me if you have no conflict, a little, some, pretty much, or a great deal of conflict. How much conflict do you have about:

1. Where (child) lives
2. How you spend money on (child)
3. How he spends money on (child)
4. The time he spends with (child)
5. His financial contribution to (child)'s support

- 0 none
- 1 a little,
- 2 some,
- 3 pretty much, or
- 4 a great deal

Appendix E

Father Financial Child Support

Now I have some questions about financial contributions (child)'s father might make to help support (child). First, I will ask about child support, including money paid directly to you as well as money you got from him through a court or government agency.

1. During the last 12 months, how much, if any, money did (child)'s father pay you in child support to spend on (him/her)?
2. *Did (child)'s father pay for or provide (his/her) health insurance?*²
 1. *Yes*
 2. *No*
3. *In addition to the money you've already told me about, in the last 12 months did he pay for (his/her) uninsured medical or dental expenses?*
 1. *Yes*
 2. *No*
4. *Did he pay for or provide anything else, such as payments to a child care provider or education?*
 1. *Yes*
 2. *No*
5. *What was that?*
 1. *Dental and medical care*
 2. *Child's education*
 3. *Clothing or other personal expenses*
 4. *Child care*
 5. *Expenses (child's, general, etc)*
6. Apart from money that you received directly from (child)'s father, or through a court or government agency, what was the total dollar value of everything else he provided for (child) in the last 12 months?

² For the purposes of this study, *italicized* items (#2-5) were not used to compute father financial child support, but are provided here as a context for understanding the inclusion of item #6. As such, only amounts from items #1 and 6 were added together to comprise this scale.

Appendix F

Mother's Satisfaction with Nonresident Father Financial Child Support

Overall, how satisfied are you with the current situation in each of the following areas?
Tell me if you are very satisfied, somewhat satisfied, somewhat dissatisfied, or very dissatisfied with:

his (Nonresident Father's) financial contribution to (child)'s support?

- 1 Very satisfied
- 2 Somewhat satisfied
- 3 Somewhat
- 4 Very dissatisfied

Appendix G

Adolescent Externalizing Behaviors

These questions are about behavior problems that many children have. As you read each behavior, decide if it is not true, sometimes true, or often true of this child's behavior over the past three months.

1. Cheats or tells lies.
2. Argues too much.
3. Bullies or is cruel or mean to others.
4. Is disobedient at home.
5. Does not seem to feel sorry after (he/she) misbehaves.
6. Has a very strong temper and loses it easily.
7. Is impulsive, or acts without thinking.
8. Has trouble getting along with other children

1 not true

2 sometimes true, or

3 often true

Appendix H

Adolescent Risky Behaviors

Sexual Activity

1. Have you ever had sexual intercourse with a (boy/girl)
2. If so, how old were you the first time?

Alcohol Use

1. At what age, if ever, did you first drink alcohol, beer or wine, or a drink of liquor, such as whiskey, gin, or scotch? Do not include sips you may have had from an older person's drink.

Marijuana Use

1. About how old, if ever, were you the first time you used marijuana or hash?

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