

Predictors of Paternal Involvement for Resident and Nonresident Low-Income Fathers

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In a sample of low-income families ($N = 239$), structural equation models assessed predictors of fathers' involvement with preschool-aged children in instrumental, behavioral, and emotional realms. Results suggest that parental conflict has a strong negative relation with father involvement. Fathers' human capital characteristics, healthy psychosocial functioning, and past stability in family relationships all predicted greater father involvement directly and/or indirectly through parental conflict. Numerous differences emerged in the predictive models between resident and nonresident fathers, although few differences were statistically significant. Results suggest that policy efforts aimed at enhancing fathers' responsible parenting should focus both on increasing fathers' human and social capital and on supporting positive family processes.

Keywords: father involvement, parental conflict, poverty, paternal commitment, human capital

In recent years, immense demographic, attitudinal, and policy changes concerning fathers have together created a substantial need for rigorous empirical evidence delineating fathers' behaviors and roles in families (Cabrera & Peters, 2000). In response to such changes, social science research has dramatically increased efforts to understand fathers' contributions to healthy family systems and child development (e.g., see Tamis-LeMonda & Cabrera, 2002). Although the scope and rigor of scholarship on father involvement are quickly expanding, substantial gaps in the knowledge base remain. Recent overviews of the literature (Coley, 2001; Marsiglio, Amato, Day, & Lamb, 2000; Palkovitz, 2002; Parke, 2000)

have identified the following as particularly important areas for future study: First, greater attention is needed to broad, theoretically driven models of positive father involvement—that is, fathers' provision to their children of developmentally appropriate care, support, and structure. Second, comprehensive assessments are needed of factors that support or prohibit positive father involvement, particularly among families facing economic and structural barriers to positive parenting (Coley, 2001). Such assessments are prescient during the early years of parenting, a pivotal developmental period during which family and environmental contexts play a salient role in determining fathering behaviors (Belsky, 1984; Lamb, 1997). Third, father involvement shows substantial variability, both within and across family structures (Hofferth, 2003); hence, new research is needed that directly assesses whether models of father involvement function similarly across diverse families.

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Defining Father Involvement

Theorists have proposed numerous conceptualizations of father involvement, although a close examination reveals many similarities across models. Recent conceptualizations (e.g., Marsiglio, Day, & Lamb, 2000; Palkovitz, 2002) argue for a comprehensive, multidimensional view of father involvement that captures both the nature and the meaning of fathers' parenting. Existing models of father involvement tend to fall into two perspectives. One perspective is built on the developmental needs of children and defines particular components of fathering that fulfill distinct child needs. These models tend to focus on the quantity of fathering—that is, how frequently fathers engage in particular parenting behaviors. For example, Fox and Bruce (1996; Bruce & Fox, 1999) defined four components of father involvement, including executive (e.g., decision making, planning), socioemotional (e.g., interaction, comfort), caregiving (e.g., feeding, transporting), and instructive (e.g., reading) functions (see Palkovitz, 1997, for a similar model). The second perspective views father involvement from fathers' standpoint. In contrast to the behavioral focus of the

child development models of father involvement, these models focus on psychological and emotional aspects of fathering. For example, identity theories focus on men's understanding of and commitment to various aspects of parenting (Minton & Pasley, 1996). Research based on identity theory has delineated the importance of role commitment, competence, satisfaction, and salience in understanding fathers' experiences of fatherhood (Henley & Pasley, 2005; Ihinger-Tallman, Pasley, & Buehler, 1993). Little research has combined these two perspectives into a holistic model of father involvement that accounts for both commitment to and engagement in the parental role. We argue that such a holistic view will provide a more complete and multidimensional perspective of fathering.

In addition to building multidimensional models of father involvement, a second central goal is to build conceptual models of fathering that can be applied across diverse families. Because family structure and family roles are becoming increasingly varied and often change over time within families, scholars have urged breadth in conceptualizations of father involvement. There is a need for models that can be used across diverse populations and situations, such as for both resident and nonresident fathers (Coley, 2003; Hawkins & Palkovitz, 1996; Marsiglio, Amato, et al., 2000). Indeed, recent scholarship suggests many similarities as well as some differences in central aspects of positive fathering across different demographic groups (Doherty, Kouneski, & Erickson, 1998) and in relations between father identity and other aspects of father involvement (Henley & Pasley, 2005; Minton & Pasley, 1996). Following these calls and building on the models we have noted, the current analyses develop a multidimensional measure of father involvement that attends to both children's and fathers' needs and captures four distinct aspects of fathering young children: provision of emotional support, provision of cognitive stimulation, instrumental involvement, and paternal competence. A central contribution of the current research is to assess whether this multidimensional measure functions similarly across resident and nonresident father families as well as across different racial/ethnic groups. We expect that resident fathers will show higher levels of father involvement than nonresident fathers. However, we also expect that the four aspects of positive father involvement will form a multidimensional composite of father involvement similarly across diverse families. Next we turn to an assessment of predictors of father involvement.

Predictors of Paternal Involvement

Belsky's (1984) model of the determinants of parenting proposes that parental involvement is influenced by three sets of factors: child characteristics, such as age and temperament; parent characteristics, such as psychological functioning; and social and contextual factors, including the parental relationship and other proximal contexts, such as employment. Other theories, such as human and social capital theories, complement this model by focusing in detail on particular aspects of parental characteristics and contexts that can be embedded in Belsky's broad framework. For example, human and social capital theories purport that parents' financial and social resources, such as income, extended family relationships, and connections with other networks, affect parental involvement and behaviors (e.g., Becker, 1991; Doherty et al., 1998; Putnam, 2000). A second central feature of Belsky's

model is that the three factors of child, parent, and contextual characteristics are not presumed to function in parallel. Rather, Belsky (1984) has proposed that parental characteristics are most important and that they affect parenting both directly and indirectly through effects on social factors, such as parental relationship quality. These arguments concur with family systems models, which suggest that experiences of individuals and dyadic relationships in families have spillover effects onto other individuals and relationships in the family system (Cox & Paley, 1997).

On the basis of these theoretical perspectives, we develop a conceptual model of predictors of father involvement. This model proposes that child characteristics, maternal characteristics, and paternal characteristics, resources, and social contexts will predict the level of positive father involvement both directly and indirectly through parental relationship quality. We briefly review literature to support the specific individual and family factors that are included in this conceptual model, focusing primarily on research conducted with low-income families, families of color, and nationally representative samples. In each section, we note debates or inconsistencies in the empirical base that we seek to address in the current research.

Child Characteristics

Research to date has noted that children's gender does not seem to influence consistently the level of father involvement in large representative samples of nonresident fathers (Cooksey & Craig, 1998; Mott, 1994; Seltzer, 1991) or smaller samples of low-income and minority families (e.g., Furstenberg & Harris, 1993). However, there is less consistency in large studies of resident fathers that used more extensive measures of father involvement (Harris, Furstenberg, & Marmer, 1998; Hofferth, 2003); hence, it is not clear whether residence status may moderate the link between child gender and father involvement or whether the complexity or focus of the father involvement measures themselves explain the discrepancies. Findings are more consistent regarding child age, with involvement of nonresidential (Lerman & Sorensen, 2000; Rangarajan & Gleason, 1998; Seltzer, 1991) and residential fathers (Hofferth, 2003) decreasing as children grow older. Little attention has been paid to how other child characteristics, such as temperament, might influence paternal involvement. Studies of primarily middle-class married parents have suggested that fathers are less involved with children who exhibit a difficult or less sociable temperament (e.g., McBride, Schoppe, & Rane, 2002; Volling & Belsky, 1991). To our knowledge, no research has addressed this issue among nonresident fathers or in minority families, in which cultural beliefs regarding child temperament may differ from those of the majority culture. From this research, we hypothesize that fathers will be less involved with children who are older and have more a difficult temperament.

Father Characteristics and Social Contexts

Characteristics and social contexts of fathers are also important determinants of father involvement, particularly human and financial capital characteristics, such as employment status, education, and income, which supply resources and skills to fathers that may be passed on to their children. Older (Lerman & Sorensen, 2000) and more educated (King, Harris, & Heard, 2004; Landale &

Oropesa, 2001; Rangarajan & Gleason, 1998) fathers tend to be more highly involved with their children across residential situations. Among nonresidential low-income and minority fathers, employment has been found to be a significant correlate of higher father involvement (Coley & Chase-Lansdale, 1999; Landale & Oropesa, 2001; Rangarajan & Gleason, 1998; Stier & Tienda, 1993; Sullivan, 1993), possibly because employed fathers are more able to fulfill the typical provider role and to contribute financially to the child's care, thus gaining the mother's cooperation. Among married and residential fathers, however, the link between employment and father involvement is more tenuous (Landale & Oropesa, 2001), with some research finding that longer work hours predict lower involvement in fathering tasks, perhaps because of less available time or greater division of labor with the mother (Yeung, Sandberg, Davis-Kean, & Hofferth, 2001). Little research has directly assessed whether links between fathers' human and financial resources and their involvement vary between resident and nonresident fathers. In addition, previous research typically has taken a static view of paternal employment. Yet low-income men of color often have fluid and unstable employment experiences. Qualitative research suggests that a more comprehensive assessment of fathers' employment history and stability may provide a better window into employment's contribution to father involvement (Edin, 2000; Jarrett, Roy, & Burton, 2002). We expect that greater financial and human capital will be related to more positive father involvement. For employment, however, we hypothesize that links may differ by residence status, with more stable employment linked to greater involvement for nonresident fathers but to less involvement for fathers who reside with their child.

There are also suggestions from the literature that fathers from different racial and ethnic backgrounds may participate in fathering differently, because of cultural norms or structural barriers and supports (Bowman & Forman, 1997; Caldera, Fitzpatrick, & Wampler, 2002; Parke et al., 2004). To date, empirical results are mixed. Research suggests that Latino, particularly Mexican American, fathers are most likely to be married. But among unmarried parents, Latino fathers have less contact with their children than African American and White low-income fathers (Lerman & Sorensen, 2000; Stier & Tienda, 1993). Recent studies using detailed measures of father involvement, such as time diaries, have noted complex and inconsistent patterns of father involvement across racial/ethnic groups (Hofferth, 2003; King et al., 2004). In short, continued exploration of commonalities and differences in father involvement across racial/ethnic groups is needed. Although it is beyond the scope of the current research to develop separate, culturally specific models of fathering norms, we assess whether African American and Latino fathers differ in the structure of the multidimensional conceptualization of father involvement or in their level of paternal involvement.

In addition to fathers' cultural background and resource characteristics, parenting models also propose that fathers' family contexts and behaviors may affect their positive and effective parenting. Fathers' past relationships in their families may be one arena of particular import. Three distinct pathways have been proposed between men's history with their own father and their later parenting behaviors with their children (Furstenberg & Weiss, 2000; Radin, 1994). For example, fathers who experienced consistent and positive parenting by their own father during childhood may have a healthy cognitive model of fathering to follow, which

helps to support their own positive paternal involvement (Shears, Robinson, & Emde, 2002). Negative experiences during childhood also may be modeled in adulthood, hence predicting less positive parenting, or may lead to an enhanced desire among men not to repeat the mistakes of their own father, thus increasing their positive involvement (Jarrett et al., 2002; Nelson, Clampet-Lundquist, & Edin, 2002).

In addition to men's experiences with their own father, their procreative and child-rearing experiences with other children also might affect their relationship with a particular child. Given the prevalence of relational instability and multiple partner fertility seen among low-income men of color (Mincy, 2002), the presence of other paternal commitments may decrease fathers' parenting involvement. For example, having biological children with different partners is expected to pull fathers' resources from a particular child (Jarrett et al., 2002). Similarly, a greater number of children in a household has been shown to decrease parental inputs to individual children, although almost no research in this area has assessed fathers' parenting behaviors as separate from mothers' (e.g., Carlson & Furstenberg, 2004).

Beyond family experiences, another area of import is fathers' psychosocial functioning. Fathers' psychological distress and antisocial behaviors provide important windows into the social resources to which they have access. Recent research has suggested that greater psychological distress (Roggman, Boyce, Cook, & Cook, 2002) and engagement in antisocial behaviors are linked with lower provision of caretaking among fathers (Jaffee, Moffitt, Caspi, & Taylor, 2003). Research with primarily middle-class married couples has found fathers' psychological distress to predict less positive parenting and greater parental conflict (Cummings, Keller, & Davies, 2005). Rich qualitative work similarly has noted the centrally destructive role that engagement in illegal activities and psychological distress can have on low-income fathers' involvement with their children (Edin, 2000; Jarrett et al., 2002), and quantitative research using comprehensive measures of father involvement and standardized assessments of psychosocial functioning is needed. Using standardized measures, we expect fathers' psychological distress and antisocial behaviors to be correlated with less positive father involvement for both resident and nonresident fathers.

Finally, in understanding current parenting behavior, it is important to consider fathers' past parenting history with a particular child and coparent (Marsiglio, Day, & Lamb, 2000). Recent research has noted the centrality of fathers' initial show of commitment and support to mothers and children at the time of the child's birth among low-income and unmarried samples (Coley & Chase-Lansdale, 1999; Garfinkel, McLanahan, Tienda, & Brooks-Gunn, 2001). Participation at the child's birth may have long-term effects for multiple reasons. Fathers who are supportive to mothers during pregnancy and birth may create a sense of coparenting and cooperation that leads to positive patterns of engagement in the coming months and years. Similarly, early participation by fathers may increase their sense of parenting efficacy and comfort. Therefore, we expect a strong positive relation between participation at birth and current father involvement. Finally, early participation may also signify paternal commitment, which is manifested through continued involvement in later years. Controlling for early paternal participation around the time of birth thus will help to control for

such continuities in the identification of concurrent correlates of father involvement.

Mother Characteristics

Much less research has considered the importance of maternal characteristics in the examination of factors that influence father–child relationships. Yet a systems perspective of families, whether they share a residence or not, suggests that mothers' characteristics and behaviors may also be influential for fathers' parenting. For instance, employed mothers may seek greater involvement from fathers to help balance work and child-rearing responsibilities (Landale & Oropesa, 2001). Mothers with high levels of education and income are more likely than mothers with fewer resources to have formal agreements concerning nonresidential fathers' continued involvement through visitation and parental responsibilities (Garfinkel, McLanahan, Meyer, & Seltzer, 1998). Finally, just as fathers' psychosocial problems might interfere with positive father involvement, so too might mothers' psychosocial problems. Extant research indicates that maternal psychological distress predicts heightened parental conflict among middle-class couples (Cummings et al., 2005; Papp, Cummings, & Schermerhorn, 2004), which, in turn, would be expected to disrupt parenting. Conversely, disrupted psychosocial functioning by mothers may require fathers to become more active and involved parents (McElwain & Volling, 1999). Research is needed to assess whether similar processes function in noncoresiding families. We expect mothers' human capital characteristics to be positively associated with positive father involvement in both resident and nonresident father families but do not propose particular hypotheses concerning maternal psychological distress.

Father–Mother Conflict

In the research we have reviewed, most results indicate a direct relation between child, mother, or father characteristics and father involvement. However, the conceptual models and explanations evoked to understand such findings often provide a more complex view, whereby characteristics and experiences of individuals may influence father behaviors not only directly but also through an effect on mother–father relationships (Belsky, 1984). Indeed, a substantial body of work has noted the central role that parental cooperation and conflict play in supporting or hindering fathers' involvement with their children (e.g., Doherty et al., 1998; Hetherington & Kelly, 2002). A large body of research on married parents suggests that marital conflict is related to less engaged and supportive and more hostile parenting by fathers (Cummings & Davies, 1994; Cummings, Goeke-Morey, & Raymond, 2004; Erel & Burman, 1995). Links between parental conflict and father involvement in unmarried parent families have also been reported. As the primary caregiver in most families, mothers often have the ability to play a gatekeeping role (Allen & Hawkins, 1999), controlling or influencing fathers' access to and interactions with their children. Extant research has found that an unstable or hostile mother–father bond interferes with the involvement of unmarried fathers with their children (Furstenberg, 1995), whereas close relationships predict greater paternal involvement (Coley & Chase-Lansdale, 1999; McKenry, Price, Fine, & Serovich, 1992). Moreover, some research has identified paths from characteristics

or behaviors of fathers to parental conflict and hence to father involvement. For example, qualitative research suggests that in situations in which mothers deem fathers unfit because of unemployment or criminal activity, heightened parental conflict is used as a barrier to father involvement (Edin & Lein, 1997). Other research suggests that parental depression may lead to parental conflict and, hence, lower father involvement in married families (Cummings & Davies, 1994). Much less is known concerning whether child or mother characteristics may contribute to father involvement through a link with mother–father relationships. Although the complex relations among family characteristics, parental conflict, and paternal engagement are not well understood, we hypothesize that parental conflict will be a central mediating variable through which other family characteristics relate to fathers' successful enactment of their fathering role.

Research Goals

On the basis of this broad expanse of past research, the goals of the current work are (a) to develop and assess a multidimensional measurement model of positive father involvement; (b) to test a conceptual model assessing how child, father, and mother characteristics predict positive father involvement in low-income families, both directly and indirectly through parental conflict; and (c) to assess whether the measurement and predictive models function similarly across resident and nonresident fathers.

Method

Sample

Data are drawn from Welfare, Children, and Families: A Three-City Study, a longitudinal and multicomponent study of the well-being of low-income children, families, and communities in the wake of welfare reform. The survey component of the Three-City Study is based on a stratified, random sample of over 2,400 children from low-income families (ages 0 to 4 or 10 to 14 years old) and their primary female caregiver (90% biological mothers; hence termed "mothers") in low-income neighborhoods in Boston, Chicago, and San Antonio. Data were collected in 1999, with a 90% screening rate and an 83% interview rate for the main survey. For further sampling details, see Winston et al. (1999).

A second component of the Three-City Study is the Embedded Developmental Study (EDS), which focuses on the 2- to 4-year-old children and their families from the main survey sample ($n = 726$). One component of the EDS included a supplemental mother interview, completed by 85% of the eligible families (those with a focal child 2–4 years old) from the main survey. Nonresponse analyses revealed no significant differences between children and mothers who participated in the mother portion of the EDS and those who were eligible but did not participate.

A second component of the EDS included direct, in-person interviews with biological fathers of the focal children. To gain access to fathers, the researchers asked each eligible EDS focal child's mother for contact information and permission to contact the child's biological father. The current study excludes families in which the father had not had contact, either in person or by telephone, with the focal child in the year preceding the survey ($n = 157$) or in which the father was deceased ($n = 7$). Of families with father contact in the previous year ($n = 562$), 21% of mothers refused permission to contact the father, and 10% could not provide identity or contact information. Eight percent of fathers refused to participate, and 14% could not be located or were inaccessible (e.g., incarcerated or living out of the country). In total, 46% of fathers who had contact with their children participated (75% of resident fathers and 37% of nonresident

fathers). After we accounted for missing data, the final sample included 239 fathers. Attrition analyses found that fathers were more likely to participate when mothers were employed more hours. According to mother reports on included and excluded fathers, participating fathers displayed more parenting responsibility and closeness to the focal child than did nonparticipants. In short, the included sample of fathers represents more involved parenting than was found in the sample of low-income families as a whole. The Three-City Study has probability weights that adjust for the sampling strata as well as nonresponse in the main survey, making the whole sample representative of children in low-income families in low-income neighborhoods in Boston, Chicago, and San Antonio. Further weight adjustments were made to account for nonresponse probabilities of resident and nonresident fathers. Hence, the use of weights helps to adjust for the nonresponse bias and create a representative sample of fathers who reside with or are in contact with their young children living in low-income families in low-income neighborhoods in the three cities.

Data Collection

For the current subsample of families, professional, experienced interviewers collected approximately 4.5 hr of interview data through surveys and assessments. Mothers and fathers participated in separate face-to-face interviews in their home. Sections of the interviews that covered particularly sensitive topics (e.g., illegal activities, psychological distress) were conducted with audio computer-assisted self-interviewing, which has been shown to increase the validity of reporting on sensitive topics (Turner et al., 1998). Interviews were also translated (and verified with back-translations) into Spanish, and this version was used by approximately 12% of the families. All respondents were paid for their participation in the study.

Measures

Child characteristics. Mothers reported on characteristics of the focal child. Age was coded in months, and gender was coded as male with female omitted. We used the Emotionality, Activity, Sociability, and Impulsivity (EASI) scale (Buss & Plomin, 1975) to assess children's temperament. Eight items from the scale formed an impulsivity/activity subscale, denoting temperament characteristics typically identified as difficult and more challenging to parents (e.g., "He/she tends to be impulsive"). Items were rated on a 5-point scale from 1 = *never like this child* to 5 = *always like this child* and were averaged ($\alpha = .69$).

Father characteristics and behaviors. Father reports were used for all father characteristics and behaviors. Fathers' race/ethnicity was coded as African American, Latino, or White/other. Fathers reported their level of education on a scale ranging from 1 = *less than high school* to 8 = *graduate degree*, and they reported age in years. Paternal financial capital was assessed through the sum of monthly income from a variety of sources, including employment, welfare and social services, and other payments. To assess possible nonlinear effects of father income (e.g., a ceiling effect whereby high income may indicate greater work effort and, hence, diminishing payoff in terms of time and energy for parenting), we also assessed a quadratic of total father income. To capture fathers' history and stability of employment, we measured five indicators of employment. Fathers reported the number of years since the age of 16 that they had worked at least some time during the year and the years in which they had worked consistently, each coded into a proportion score. Fathers also reported more recent employment consistency, noting the number of months they had worked a steady job and the number of months they had worked in any type of job in the past 2 years. Finally, fathers reported the total number of hours they currently worked per week. The employment variables were standardized and averaged into a total score of employment stability ($\alpha = .79$).

Fathers' involvement in illegal activities in the last year was measured with 14 items modified from the National Longitudinal Study of Youth (Borus et al., 1982). Items capture fathers' engagement in property, violent,

and drug crimes (e.g., "In the past twelve months, how often have you been in trouble with the police?"). Each item was coded on a scale ranging from 1 = *never* to 4 = *more than 5 times*. Factor analysis confirmed a one-factor structure. To address the skewed distribution at both the item and the scale level, we standardized, averaged, and logged items to create a total score of illegal activities ($\alpha = .80$).

Fathers' psychological distress was assessed with the Brief Symptom Inventory-18 (Derogatis, 2000), an 18-item self-report measure that addresses symptoms of somatization, depression, and anxiety. Respondents were asked to rate on a 5-point scale from 0 (*not at all*) to 4 (*extremely*) the extent to which they had experienced symptoms in the past week. We calculated a total score by averaging and logging all 18 items ($\alpha = .91$).

Fathers' childhood experiences of consistent paternal involvement were measured through retrospective reports. Length of residence with the father's own biological father prior to the age of 16 and frequency of contact during nonresidential times were combined into one variable designating contact with one's own father, coded from 1 = *never live with/see* to 4 = *always*.

We created two variables to assess fathers' other paternal commitments through household rosters and childbearing histories. The first variable assessed the number of biological children living in a different household from the focal child, which might encourage a splitting of fathers' paternal resources between households. The second variable was the number of children under the age of 18 in the fathers' household excluding the focal child, to assess fathers' caregiving burden and distribution of resources in their own household. Both variables were coded on a numerical scale ranging from 0 to 4 or above.

Fathers' participation at the time of the focal child's birth was assessed with items drawn from the Baltimore Multigenerational Family Study (Coley & Chase-Lansdale, 1999). Fathers reported on whether (1 = *yes*, 0 = *no*) they provided support during pregnancy, attended the child's birth, and visited the child in the hospital following birth. Reports were averaged into a total score of participation at birth.

Mother characteristics and functioning. Mothers reported all maternal characteristics during the main survey interview. Maternal age was coded in years, and education was coded on a scale ranging from 1 = *less than high school* to 8 = *graduate degree*. Two indicators of employment, the total number of hours worked per week and the number of months worked in the past 2 years, were standardized and averaged into a measure of work consistency. We measured mothers' financial capital in the same manner as fathers', summing monthly income from all sources. Mothers' psychological functioning ($\alpha = .92$) and illegal activities ($\alpha = .72$) were assessed with the same scales as used with fathers.

Parental conflict. Both fathers and mothers reported on father-mother conflict surrounding parenting. The use of both reports decreases concerns over reporter bias and shared error variance. Six items regarding conflict and cooperation were adapted from the Early Head Start father study (Vogel, Boller, Faerber, Shannon, & Tamis-LeMonda, 2003). Both respondents were asked to rate from 1 (*never*) to 5 (*always*) their frequency of disagreement about how to raise their child, the father's interactions with child, and the father's financial contributions. Parents also reported how much the father's involvement interfered or conflicted with the mother's parenting and how much his involvement and financial and material support helped the mother (1 = *none* to 4 = *a lot*). Factor analyses by reporter indicated that all six items from each reporter loaded onto one factor. Cooperation items were reversed, and items were standardized and averaged into measures of parental conflict with adequate reliability (α s = .59 for fathers and .57 for mothers). The correlation between the two measures of conflict was .42 ($p < .01$), and they were used to create a latent construct of parental conflict surrounding parenting in the path analyses.

Father involvement. Four scales tapped into central aspects of positive father involvement that are developmentally appropriate for parenting preschool-age children: cognitive stimulation, emotional support, paternal

competence, and instrumental involvement. A parent-child activities scale adapted from the Panel Study of Income Dynamics (PSID) Child Supplement (Hofferth, Davis-Kean, Davis, & Finkelstein, 1999) assessed the frequency of fathers' engagement in various parent-child activities in the past year on a 5-point scale from 1 = *almost every day* to 5 = *never in the past 12 months* (reversed so that high scores indicated more involvement). Factor analyses revealed three subscales, two of which are used in the current analyses. Cognitive stimulation was the mean of six items addressing fathers' engagement in enriching cognitive and physical activities with the child (e.g., "How often have you played with [child] with toys or puzzles?" "How often have you taken [child] to fun places like the zoo or a sporting event?" $\alpha = .89$). Emotional support was the mean of six items that tap into fathers' provision of warmth, support, and responsiveness, (e.g., "How often have you hugged and kissed child?" $\alpha = .91$). Fathers' parenting competence was measured with items from the Fragile Families Study (Center for Research on Child Wellbeing, 2005), in which fathers rated how well they provided financial support, care, love, and protection, along with teaching about life and being an authority figure (1 = *not very well* to 3 = *very well*; $\alpha = .86$). To address skew, we transformed scales by reflecting and inverting. Finally, we created fathers' instrumental involvement from two items regarding the number of hours per week fathers cared for the child and the level of responsibility the father took for the child's care, both coded on a scale from 1 to 4. To split fathers into resident and nonresident groups, we used fathers' reports of whether they lived with the focal child at the time of the interview.

Sample Characteristics

Table 1 presents unweighted descriptives on all study variables for the sample as a whole and for resident and nonresident fathers separately. Half of the participants were coresiding with the focal child and mother, and half were not. Of the residential group, 56% were married. Fifty-six percent of children were boys, and children averaged 3.5 years of age. On average, mothers were 28 years old, had just over a high school degree in education, worked 16 hr per week, and reported approximately \$600 per month in income. Fathers averaged 30 years old. Similar to mothers, their average education level was a high school degree. Forty-four percent were African American, 46% were Latino (primarily Mexican American and Puerto Rican, followed by Dominicans and other Latino subgroups), and 10% were non-Latino White and other ethnicities. Fathers were currently working slightly over 30 hr per week and had been employed between two thirds and three quarters of the time in the previous years. Fathers earned nearly \$1,100 per month on average. Fathers had an average of one to two other biological children and lived with an average of two children other than the focal child.

Across both mothers' and fathers' characteristics, families with a residential father reported greater financial and human capital than those with a nonresidential father. Latino families were also more likely to coreside than were African American families. Resident fathers and mothers also reported fewer illegal behaviors and less psychological distress than couples who were not coresiding. Regarding the father involvement scales,

Table 1
Means and Percentages of Child, Mother, and Father Characteristics; Parental Conflict; and Father Involvement Variables for Fathers

| Variable | Range | All fathers (<i>N</i> = 239) | | Nonresident fathers (<i>n</i> = 120) | | Resident fathers (<i>n</i> = 119) | |
|-------------------------------|----------------|----------------------------------|-----------|--|-----------|---------------------------------------|-----------|
| | | <i>M</i> | <i>SD</i> | <i>M</i> | <i>SD</i> | <i>M</i> | <i>SD</i> |
| Child characteristics | | | | | | | |
| Child age (months) | 25.00–69.00 | 42.44 | 10.44 | 43.11 | 11.25 | 41.77 | 9.56 |
| Child is male (%) | 0.00–1.00 | 56 | | 58 | | 55 | |
| Child temperament | 1.38–5.00 | 3.12 | 0.75 | 3.19 | 0.68 | 3.06 | 0.80 |
| Mother characteristics | | | | | | | |
| Mother age (years) | 16.00–64.00 | 28.35 | 7.63 | 27.53 | 8.13 | 29.17 | 7.03 |
| Mother education | 1.00–8.00 | 4.19 | 2.16 | 4.30 | 2.07 | 4.08 | 2.26 |
| Mother employment | –0.89–2.03 | –0.00 | 0.90 | –0.03 | 0.84 | 0.03 | 0.96 |
| Mother income | 0.00–2700.00 | 603.35 | 619.01 | 664.35 | 577.25 | 541.84 | 655.14 |
| Mother psychological distress | 0.00–3.83 | 1.68 | 1.06 | 1.74 | 1.08 | 1.62 | 1.04 |
| Mother illegal activities | –0.31–1.00 | –0.04 | 0.34 | 0.03 | 0.39 | –0.12 | 0.27 |
| Father characteristics | | | | | | | |
| Father age (years) | 18.00–53.00 | 30.45 | 7.39 | 29.62 | 7.54 | 31.29 | 7.16 |
| Father Latino (%) | 0.00–1.00 | 45 | | 40 | | 51 | |
| Father African American (%) | 0.00–1.00 | 44 | | 51 | | 37 | |
| Father education | 1.00–8.00 | 3.87 | 1.94 | 3.65 | 1.88 | 4.09 | 1.98 |
| Father employment | –1.95–2.10 | 0.00 | 1.00 | –0.20 | 1.06 | 0.20 | 0.90 |
| Father income | 0.00–11,822.00 | 1,094.62 | 1,358.38 | 857.79 | 1,033.89 | 1,333.43 | 1,590.33 |
| Participation at birth | 0.00–1.00 | 0.87 | 0.24 | 0.82 | 0.29 | 0.93 | 0.16 |
| Other biological children | 0.00–4.00 | 1.49 | 1.40 | 1.44 | 1.45 | 1.54 | 1.36 |
| No. children in household | 0.00–4.00 | 1.97 | 1.31 | 2.41 | 1.30 | 1.54 | 1.17 |
| Contact with own father | 1.00–4.00 | 2.86 | 1.21 | 2.86 | 1.19 | 2.87 | 1.23 |
| Father psychological distress | 0.00–3.30 | 1.21 | 1.09 | 1.32 | 1.16 | 1.09 | 1.01 |
| Father illegal activities | 0.51–1.60 | 0.67 | 0.20 | 0.71 | 0.23 | 0.62 | 0.17 |
| Parental conflict | | | | | | | |
| Father report | –0.66–1.56 | –0.00 | 0.57 | 0.19 | 0.62 | –0.20 | 0.44 |
| Mother report | –0.77–1.68 | –0.00 | 0.61 | 0.19 | 0.60 | –0.20 | 0.57 |
| Paternal involvement | | | | | | | |
| Cognitive stimulation | 0.20–0.86 | 0.45 | 0.17 | 0.40 | 0.16 | 0.52 | 0.17 |
| Emotional support | 0.21–1.00 | 0.65 | 0.25 | 0.55 | 0.25 | 0.76 | 0.22 |
| Parenting competence | 0.33–1.00 | 0.78 | 0.20 | 0.73 | 0.22 | 0.83 | 0.16 |
| Instrumental involvement | 1.00–4.00 | 3.37 | 0.82 | 3.00 | 0.96 | 3.75 | 0.37 |

resident fathers consistently reported higher average levels of involvement than did nonresident fathers and also had less variability in their reports of involvement.

Hypothesized Model and Statistical Methods

Analyses assessed measurement models and structural models of father involvement using structural equation modeling (using the program AMOS 4.01; Arbuckle, 1999). In the structural model, father involvement is viewed as a product of father, mother, and child characteristics, which have both direct effects and indirect effects mediated through parental conflict. Models were run for the entire sample of fathers and then separately for nonresident and resident fathers, followed by multigroup modeling techniques with equality constraints to test whether parameter estimates varied across groups (Bryne, 2001). In all analyses, correlations among predictor variables were allowed when indicated by the bivariate correlations and model statistics. The whole sample analyses were run both weighted and unweighted. However, because of analytic constraints, multigroup models could not be run with weighted data. The weighted models for the whole sample produced similar findings to the unweighted models, with essentially identical patterns of significant structural regression paths indicating the same substantive relations among variables. Note that all results described report unweighted analyses to provide consistency across the whole group and multigroup models.

Results

Measurement Models

The first set of analyses used confirmatory factor analysis measurement models to create a latent construct of father involvement using the four observed measures of cognitive stimulation, emotional support, instrumental involvement, and parenting competence. For the sample as a whole, the model indicated a generally strong fit with the data, $\chi^2(1, N = 239) = 3.17$ (comparative fit index [CFI] = .99, goodness-of-fit index [GFI] = .99, root-mean-square error of approximation [RMSEA] = .10), and all of the paths were highly significant, with standardized coefficients ranging from .69 to .81 (all $ps < .001$). Separate models by resident status also showed a good fit for nonresident fathers, $\chi^2(1, N = 120) = 1.90$ (CFI = 1.00, GFI = .99, RMSEA = .09; all paths $p < .001$), and resident fathers, $\chi^2(2, N = 119) = 0.21$ (CFI = 1.00, GFI = 1.00, RMSEA = .00; all paths $p < .05$).

Multigroup modeling indicated variance in the resident versus nonresident father models, $\Delta\chi^2(4, N = 120) = 59.68, p < .001$; thus, we reran the multigroup models constraining one path at a time (Bryne, 2001). Results indicated that the only path showing variance was that from instrumental involvement, $\Delta\chi^2(1, N = 120) = 13.54, p < .001$, with nonresident fathers showing a stronger contribution of instrumental involvement to the latent construct of father involvement. In the structural models using multigroup modeling, the path between father involvement and instrumental involvement was allowed to vary, with other paths constrained. Cross-ethnic equivalence was also tested with multigroup analyses. Results indicated that the father involvement measurement model was invariant for Latino and African American fathers, $\Delta\chi^2(4, N = 109) = 6.95$, supporting the use of the measures and latent construct in this sample.

Model Trimming

Prior to testing the full structural model, we undertook bivariate correlations and ordinary least squares regression modeling to

assess the strength of relations between the predictor variables and father involvement. Correlations for the entire sample are presented in Table 2. These initial analyses indicated that child age, father age, other biological children, children in the household, maternal income, maternal employment, maternal education, maternal illegal activities, and the quadratic of father income were not significantly related to father involvement, either directly or indirectly through parental conflict. Thus, these variables were trimmed from the model. White fathers were found not to differ from Latino fathers, so these groups were combined in relation to African American fathers. All other predictor variables functioned in an independent manner to predict father involvement and were retained. We refer to the resulting trimmed model as the *full conceptual model* to distinguish it from the fully direct model and the fully mediated model.

Structural Models Predicting Father Involvement

In the next sets of analyses, we tested the trimmed full conceptual model for the sample as a whole, then separately for nonresident and resident fathers. For each group, we estimated the full conceptual model to assess both direct paths from the predictor variables to father involvement and indirect paths mediated through parental conflict. Following this, we assessed a fully mediated model, constraining all of the direct paths to zero. Then we assessed a fully direct model, setting all the paths through conflict to zero. Chi-square comparisons assessed the relative fit of these variants in comparison with the full conceptual model (Kline, 1998).

Whole sample model predicting father involvement. The structural model assessing predictors of father involvement for the sample as a whole produced a good fit, $\chi^2(110, N = 239) = 169.92$ (CFI = .92, GFI = .93, RMSEA = .05), with 75% of the variance explained in father involvement. Models comparing this model with a fully mediated model, $\Delta\chi^2(12, N = 239) = 34.71, p < .001$, and a fully direct model, $\Delta\chi^2(15, N = 239) = 149.03, p < .001$, indicated that the full conceptual model with both direct and indirect paths showed the best fit to the data. Figure 1 presents unstandardized path coefficients, standard errors, and standardized path coefficients (showing only significant paths), and the first column of Table 3 presents standardized direct, indirect, and total effects for the full conceptual model with the total sample. Parental conflict showed a strong negative relation with father involvement, with a large effect size. Moreover, parental conflict partially mediated many of the relations between father characteristics and father involvement. With respect to child and mother characteristics and father involvement, the results indicate sparse effects. Greater psychological distress in mothers predicted marginally higher father involvement directly but also predicted higher parental conflict and hence lower involvement. In short, the small direct and indirect effects largely counteracted each other, leading to a null total effect. Having a male child also showed a small positive direct effect on father involvement, which was counteracted by a small negative indirect effect through parental conflict. Child temperament and mother age showed no significant direct or indirect paths to father involvement.

In terms of father characteristics and behaviors, more significant findings emerged. Fathers' employment stability showed a small positive effect on their involvement, which was primarily indirect,

Table 2
Bivariate Correlation Table for Whole Sample (N = 239)

| Variable | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
|-----------------------------------|--------|--------|--------|--------|--------|--------|-------|------|------|--------|-------|
| 1. Cognitive stimulation | — | | | | | | | | | | |
| 2. Emotional support | .59** | — | | | | | | | | | |
| 3. Parenting competence | .48** | .35** | — | | | | | | | | |
| 4. Instrumental involvement | .50** | .56** | .57** | — | | | | | | | |
| 5. Father report of conflict | -.40** | -.31** | -.44** | -.55** | — | | | | | | |
| 6. Mother report of conflict | -.36** | -.28** | -.30** | -.38** | .45** | — | | | | | |
| 7. Child age (months) | .00 | -.12 | .06 | -.02 | .00 | -.04 | — | | | | |
| 8. Child is male | -.03 | -.12 | .01 | .01 | .06 | .12 | -.05 | — | | | |
| 9. Child temperament | -.07 | .05 | -.09 | .03 | .04 | .18** | -.05 | .08 | — | | |
| 10. Mother age (years) | -.02 | -.02 | .04 | .00 | -.09 | -.01 | .25** | .02 | -.03 | — | |
| 11. Mother education | -.01 | .10 | -.01 | .02 | -.07 | .07 | -.02 | .07 | .06 | .18** | — |
| 12. Mother employment | .11 | .10 | .01 | .07 | -.06 | .03 | .02 | .10 | -.03 | -.03 | .34** |
| 13. Mother income | -.11 | .00 | .02 | .05 | -.05 | .12 | .02 | .07 | .07 | .08 | .21** |
| 14. Mother psychological distress | -.13* | -.03 | -.12 | -.13* | .20** | .32** | .01 | .04 | .13 | .02 | .08 |
| 15. Mother illegal activities | -.18** | -.03 | -.12 | -.14* | .21** | .21** | -.08 | .07 | .17* | -.19** | .07 |
| 16. Father age (years) | .01 | .00 | .12 | .12 | -.13 | -.13* | .25** | -.01 | -.06 | .61** | .10 |
| 17. Father African American | -.14* | -.02 | -.13* | -.08 | .06 | .04 | -.13* | .13* | .10 | -.02 | .32** |
| 18. Father education | .18** | .15* | .10 | .18** | -.10 | -.07 | -.06 | .00 | .02 | .09 | .21** |
| 19. Father employment | .21** | .17* | .26** | .35** | -.31** | -.21** | -.05 | .03 | -.04 | .07 | .05 |
| 20. Father income | .08 | .08 | .12 | .20** | -.21** | -.16* | .03 | .08 | -.05 | .09 | .00 |
| 21. Father income square | .00 | .04 | .00 | .09 | -.09 | -.11 | .06 | .05 | -.03 | .05 | -.02 |
| 22. Participation at birth | .33** | .35** | .31** | .41** | -.25** | -.22** | -.03 | .03 | -.05 | -.07 | .05 |
| 23. Other biological children | -.10 | -.06 | -.02 | -.06 | .03 | -.05 | .13* | .00 | -.09 | .14* | -.09 |
| 24. No. children in household | .03 | .05 | .02 | -.01 | -.09 | -.08 | -.06 | .07 | -.11 | .05 | -.02 |
| 25. Contact with own father | .04 | .03 | .14* | .13* | -.04 | -.09 | .05 | .01 | -.12 | .10 | .02 |
| 26. Father psychological distress | -.24** | -.15* | -.30** | -.17** | .40** | .15* | .01 | .05 | -.01 | -.08 | -.04 |
| 27. Father illegal activities | -.22** | -.17** | -.43** | -.38** | .40** | .24** | -.07 | -.06 | .06 | -.19** | -.07 |

* $p < .05$. ** $p < .01$.

mediated through parental conflict. Similarly, fathers' income was positively related to their involvement indirectly through a prediction of lower parental conflict, although this effect was small and was counteracted by a similarly sized, albeit nonsignificant, negative direct relation to involvement. Conversely, fathers' engagement in illegal activities showed a moderate-sized negative relation to father involvement, which again was primarily indirect, mediated through greater parental conflict. Like the results for mothers, fathers' psychological distress showed mixed direct and indirect relations to father involvement. Greater psychological distress in fathers predicted greater parental conflict, thus relating to lower involvement, but showed a positive direct relation to father involvement. Finally, fathers' participation at the focal child's birth showed a moderate to large positive relation to their involvement, which was partially mediated by parental conflict. No significant effects were found in the whole sample for father education, race/ethnicity, or contact with one's own father, although African Americans were marginally less involved and greater paternal education was marginally linked with greater involvement, both small direct effects.

Nonresident father model predicting father involvement. The structural model assessing predictors of father involvement for the nonresident fathers produced a good fit, $\chi^2(113, N = 120) = 130.89$ (CFI = .96, GFI = .89, RMSEA = .04), which explained 80% of the variance in father involvement. As for the whole sample, for nonresident fathers, comparisons of the full conceptual model with a fully mediated model, $\Delta\chi^2(12, N = 120) = 27.47$, $p < .01$, and a fully direct model, $\Delta\chi^2(12, N = 120) = 48.11$, $p < .001$, indicated that the full conceptual model with both direct and

indirect paths showed the best fit to the data. Results are presented in Figure 2 and in the second panel of Table 3. As in the full sample of families, parental conflict showed a large negative relation to father involvement. Also similar to the full sample, having a male child predicted higher parental conflict and hence lower involvement, but this was partially counteracted by a positive (albeit insignificant) direct relation to father involvement, leading to a negligible total effect. Mother characteristics were also significant. Older maternal age directly predicted lower father involvement, with a relatively small effect size. As in the total sample, maternal psychological distress showed mixed relations to father involvement. Overall, the total effect of maternal psychological distress was negative, driven by a moderate-sized positive relation to parental conflict that was only partially counteracted by a very small and nonsignificant positive direct link to father involvement.

Numerous father characteristics significantly predicted father involvement for nonresident fathers. Fathers' employment stability predicted greater father involvement, with a small-sized effect, mediated through lower parental conflict. Fathers' engagement in illegal activities had a moderate-sized negative effect on their involvement, again mediated almost entirely through increased conflict between parents. In contrast, greater contact with one's own father and greater participation at the time of the focal child's birth both predicted higher father involvement for nonresident fathers, primarily directly, with moderate-sized effects. Other characteristics of fathers, including race/ethnicity, income, education, and psychological distress, did not show significant direct or indirect effects on father involvement for nonresident fathers,

| | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 |
|-------|-------|-------|--------|--------|-------|------|--------|--------|------|--------|-------|-------|------|-------|----|----|
| — | | | | | | | | | | | | | | | | |
| .43** | — | | | | | | | | | | | | | | | |
| -.01 | .12 | — | | | | | | | | | | | | | | |
| .03 | .11 | .37** | — | | | | | | | | | | | | | |
| -.03 | .02 | -.05 | -.14* | — | | | | | | | | | | | | |
| .22** | .28** | .08 | .21** | .01 | — | | | | | | | | | | | |
| .14* | .09 | -.01 | -.01 | .16* | .19** | — | | | | | | | | | | |
| .02 | -.06 | -.12 | -.21** | .19** | -.12 | .14* | — | | | | | | | | | |
| -.10 | .00 | -.06 | -.12 | .14* | -.04 | .14* | .19** | — | | | | | | | | |
| -.09 | -.01 | -.02 | -.07 | .05 | -.05 | .11 | .00 | .84** | — | | | | | | | |
| .04 | -.05 | -.09 | .00 | -.01 | -.02 | .10 | .20** | .16* | .10 | — | | | | | | |
| -.10 | .00 | .02 | .02 | .33** | -.03 | -.06 | -.01 | .16* | .15* | -.08 | — | | | | | |
| .00 | -.11 | .03 | .16* | .20** | .13 | .13* | -.11 | .06 | .13* | -.20** | .46** | — | | | | |
| .04 | -.05 | -.04 | .03 | .17** | -.12 | -.04 | .06 | .00 | -.07 | .10 | .02 | .03 | — | | | |
| .01 | .01 | .16* | .25** | -.10 | .05 | -.01 | -.23** | -.04 | .05 | -.16* | .14* | .19** | -.06 | — | | |
| .01 | -.07 | .13* | .16* | -.27** | .13* | -.12 | -.30** | -.21** | -.11 | -.20** | -.03 | .09 | -.04 | .51** | — | |

although African American fathers showed a weak tendency to report lower father involvement than Latino and White fathers, with controls for other child, mother, and father characteristics.

Resident father model predicting father involvement. Figure 3 and the final column in Table 3 present results for the resident father structural model. The full conceptual model for resident fathers produced a mediocre fit, $\chi^2(115, N = 119) = 182.64$ (CFI = .71, GFI = .86, RMSEA = .07), although a large proportion of variance (81%) in father involvement was explained. Once again, comparisons of the full conceptual model with a fully mediated model, $\Delta\chi^2(12, N = 119) = 18.87, p < .10$, and a fully direct model, $\Delta\chi^2(14, N = 119) = 58.35, p < .001$, indicated that the full conceptual model showed the best fit to the data.

In the resident father model, fewer child, mother, and father characteristics significantly predicted father involvement, and in many cases, the direct and indirect effects counteracted each other, leading to minimal total effects. A more difficult child temperament was indirectly related to lower father involvement through parental conflict with a moderate-sized effect, but this was partially counteracted by a positive direct link between difficult child temperament and father involvement. Similarly, greater psychological distress in mothers showed a positive direct link to father involvement as well as a negative indirect link through increased parental conflict. These two moderate-sized effects counteracted each other, thereby leading to no total effect on involvement. Child gender and maternal age were not significant predictors.

For fathers' income, direct and indirect effects again cancelled each other out, leading to no significant total effect. Greater paternal income was directly related to lower involvement among

resident fathers but also predicted lower conflict and hence higher involvement; both the direct and the indirect paths showed moderate effect sizes. In contrast, both fathers' psychological distress and their participation around the focal child's birth showed relations to father involvement that were mediated through parental conflict. Fathers' psychological distress predicted heightened conflict, whereas involvement at the child's birth led to lower conflict. No other father characteristics (race/ethnicity, contact with own father, employment, education, or illegal activities) were significant direct or indirect predictors of father involvement for resident fathers.

Father Residence as a Moderator of Predictors of Father Involvement

The final step of the analyses involved multigroup comparisons between the full nonresident and resident father models to assess whether links between child, mother, and father characteristics and father involvement were significantly different for resident versus nonresident father families. Multigroup comparisons found that the resident and nonresident father models were variant, $\Delta\chi^2(25, N = 120) = 73.61, p < .001$. Follow-up multigroup modeling with one path constrained at a time indicated that the paths from father psychological distress to parental conflict, $\Delta\chi^2(1, N = 120) = 5.48, p < .05$, and from child temperament to parental conflict, $\Delta\chi^2(1, N = 120) = 5.14, p < .05$, varied, with both being stronger for resident than for nonresident fathers. No other paths were significantly different ($p > .05$) between the resident and nonresident father models. In short, although the pattern of significant

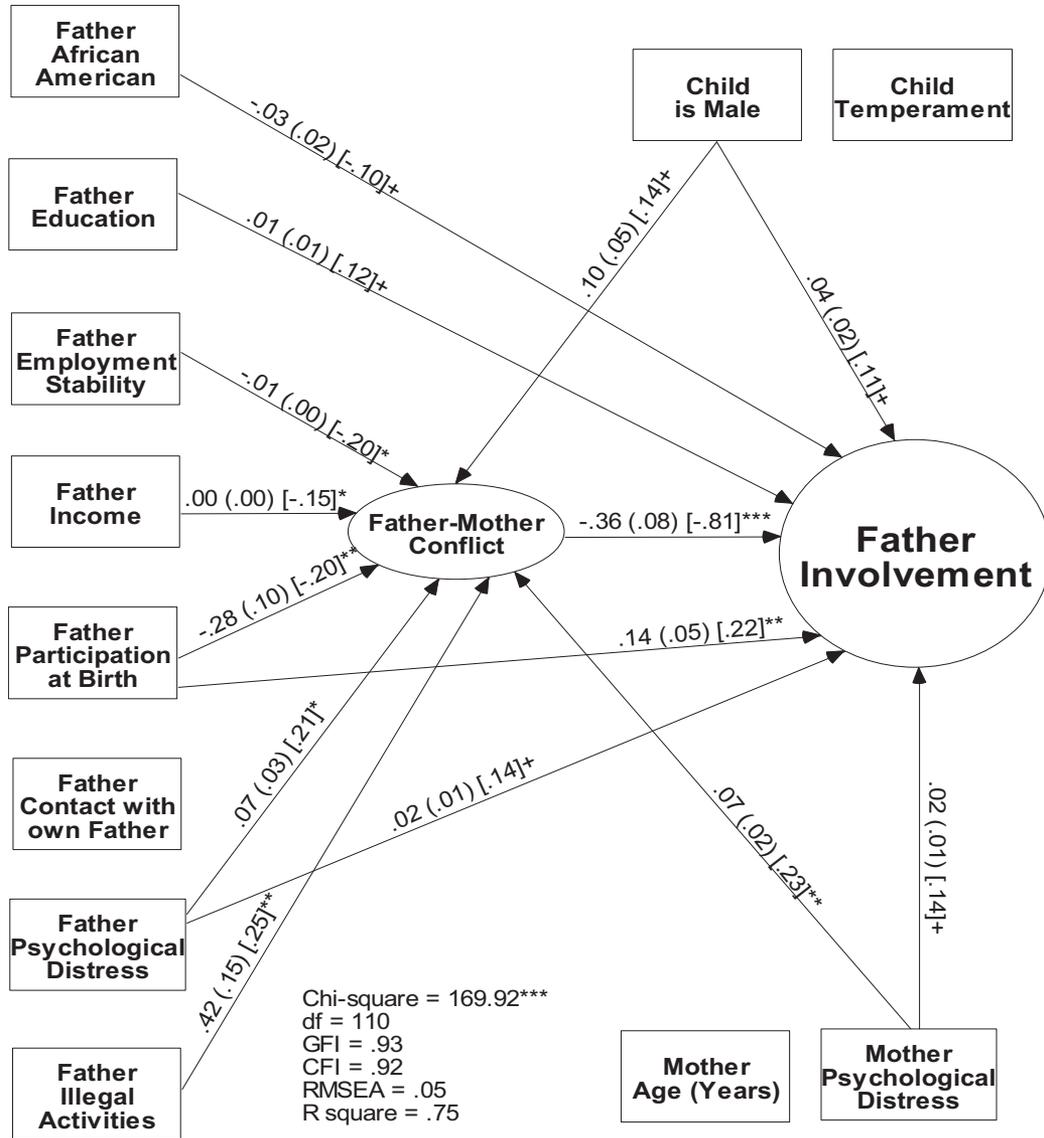


Figure 1. Path model of father involvement for full sample ($N = 239$). Numbers represent unstandardized path coefficients, with standard errors in parentheses and standardized coefficients in brackets. Nonsignificant paths are not shown. df = degrees of freedom; GFI = goodness-of-fit index; CFI = comparative fit index; RMSEA = root-mean-square error of approximation. † $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

predictors of father involvement varied between the two groups, very few of these differences were statistically significant.

Discussion

Building our understanding of why and how fathers in disadvantaged circumstances participate in parenting their children has become a central concern for policy makers, researchers, and practitioners. The current research contributes important new information on fathering experiences in low-income families. Results support the argument that father involvement is a multidimensional and multidetermined phenomenon that appears to function with fair similarity across two-parent versus one-parent families and between Latino and African American fathers in this

low-income sample. Resident fathers showed higher levels of and less variability in father involvement than did nonresident fathers. Yet for all subgroups of fathers, their emotionally supportive behaviors, cognitively stimulating behaviors, instrumental involvement, and feelings of competence regarding their parental contributions all contributed substantially to a holistic latent construct of positive father involvement. This comprehensive measure answers calls by scholars for theory-based, developmentally appropriate, and broad measures of positive father involvement that can cut across family structures and racial/ethnic groups of fathers (Marsiglio, Amato, et al., 2000; Palkovitz, 2002).

This research further contributes to a growing base of scholarship assessing factors that support or prohibit positive father in-

Table 3
Standardized Direct, Indirect, and Total Effects of Child, Mother, and Father Characteristics and Parental Conflict on Father Involvement

| Variable | All fathers (<i>N</i> = 239) | | | Nonresidential fathers (<i>n</i> = 120) | | | Residential fathers (<i>n</i> = 119) | | |
|-------------------------------|----------------------------------|----------|-------|---|----------|-------|--|----------|-------|
| | Direct | Indirect | Total | Direct | Indirect | Total | Direct | Indirect | Total |
| Child characteristics | | | | | | | | | |
| Child is male | .11 | -.11 | .00 | .14 | -.22 | -.08 | .09 | .03 | .12 |
| Child temperament | .09 | -.03 | .06 | .09 | .08 | .17 | .09 | -.28 | -.19 |
| Mother characteristics | | | | | | | | | |
| Mother age (years) | -.07 | .02 | -.05 | -.17 | .00 | -.17 | .12 | -.11 | .01 |
| Mother psychological distress | .14 | -.19 | -.05 | .10 | -.27 | -.17 | .34 | -.26 | .08 |
| Father characteristics | | | | | | | | | |
| Father African American | -.10 | .02 | -.08 | -.15 | .02 | -.13 | -.17 | .19 | .02 |
| Father education | .12 | .02 | .14 | .09 | -.00 | .09 | .21 | .01 | .22 |
| Father employment | .03 | .16 | .19 | .05 | .17 | .22 | -.14 | .06 | -.08 |
| Father income | -.09 | .12 | .03 | .05 | .03 | .08 | -.40 | .29 | -.11 |
| Participation at birth | .22 | .16 | .38 | .23 | .11 | .34 | -.00 | .22 | .21 |
| Contact with own father | .08 | .01 | .09 | .19 | .06 | .25 | -.16 | .07 | -.09 |
| Father psychological distress | .14 | -.17 | -.03 | .16 | -.04 | .12 | .12 | -.46 | -.34 |
| Father illegal activities | -.07 | -.21 | -.27 | -.04 | -.30 | -.34 | -.16 | .03 | -.13 |
| Parental conflict | -.81 | | -.81 | -.76 | | -.76 | -1.0 | | -1.0 |

involvement. On the basis of Belsky's (1984) determinants of parenting model, analyses tested a conceptual model assessing the contributions of child, mother, and father characteristics and experiences to positive father involvement. Overall, results suggest that a variety of individual and contextual factors were predictive of positive father involvement, both directly and indirectly through an association with parental conflict. Moreover, both similarities and differences were found in predictors of father involvement between resident and nonresident fathers, although few of the differences were statistically significant. Before we review the main findings in greater detail, it is important to note that the results are particular to a sample of at least marginally involved, low-income fathers of primarily Latino and African American ethnicity and cannot necessarily be generalized to other families. Within this population, findings point to a number of intriguing patterns, particularly highlighting the centrality of fathers' human capital characteristics and past family relationships, parental psychosocial problems, and parental conflict in predicting low-income fathers' engagement in parenting their young children.

Predictors of Father Involvement

Family relationships. Perhaps the most central finding concerns the role of parental conflict and cooperation. Father-mother conflict concerning parenting and financial issues showed a substantial negative relation with father involvement in both residential and nonresidential father families. Moreover, parental conflict appeared to act as a central mediator through which other family characteristics were related to father involvement. Given mothers' traditional primary role in child rearing, women often have significant influence over fathers' access to and relationship with their children (Allen & Hawkins, 1999). This control is heightened measurably in nonresidential father families with young children, in which fathers need to collaborate with the mother to have physical access to the child. Hence, retaining a cooperative and relatively low-conflict relationship, whether in or outside of a

romantic involvement, appears central to fathers' continued paternal involvement. It is also important to acknowledge that this relation may be bidirectional, with greater father involvement contributing to more collaborative parental relations and alleviation of conflict between mothers and fathers. Future research should attempt to better understand the bidirectional pathways between these constructs over time as parents negotiate their parental roles. Moreover, our results focus explicitly on conflict surrounding parenting and do not address whether other types of parental conflict may relate differently to fathering. Recent research by Margolin, Gordis, and John (2001) suggests that parental conflict and cooperation regarding parenting may be a mediating process through which other types of parental hostility affect parenting practices.

In addition to the mother-father relationship, other family relationships were also important correlates of positive father involvement. For instance, more consistent childhood contact with one's own biological father predicted greater father involvement for nonresident fathers. Contact and coresidence with their own father might have led nonresident fathers to develop a model of involved fathering that they replicated a generation later with their children. Although qualitative research has indicated that nonresident fathers with a negative history with their own father seek to alter such patterns with their children (Nelson et al., 2002), the current results suggest that these goals are not realized consistently among disadvantaged nonresident fathers.

Our results also found long-term links between father participation at the time of the focal child's birth and continued involvement over time. One interpretation is that a strong father role identity and commitment to parenthood are shown through high involvement at all points of the child's life. In turn, this buttresses the interpretation of other relations in the model, indicating that child, mother, and father characteristics and family processes related significantly to father involvement once paternal commitment and continuity in involvement were factored out.

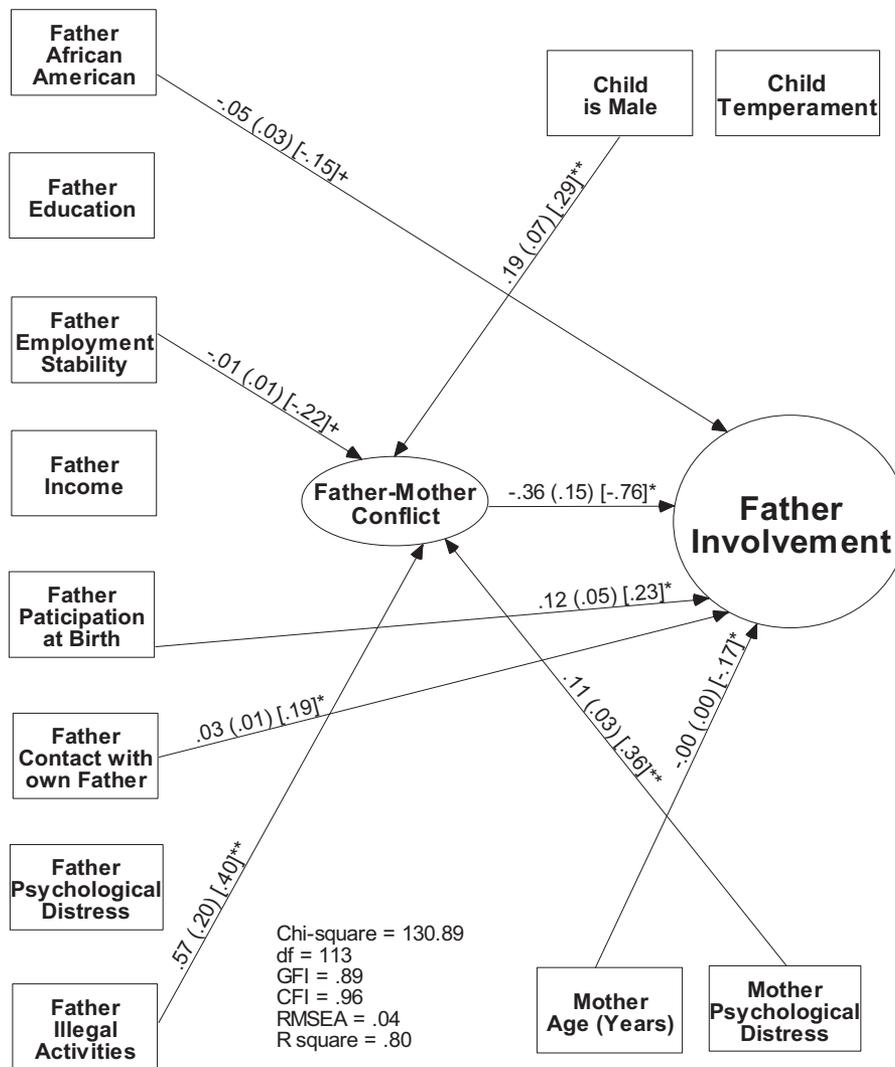


Figure 2. Path model of father involvement for the nonresidential father sample ($n = 120$). Numbers represent unstandardized path coefficients, with standard errors in parentheses and standardized coefficients in brackets. Nonsignificant paths are not shown. $df =$ degrees of freedom; GFI = goodness-of-fit index; CFI = comparative fit index; RMSEA = root-mean-square error of approximation. [†] $p < .10$. ^{*} $p < .05$. ^{**} $p < .01$.

The measure of fathers’ participation at birth may also tap into the centrality of early parenting experiences, inclusion, and cooperation, which could causally influence later involvement. It is interesting that our results indicated a primarily direct relation between early father participation and later father involvement among nonresident fathers. When fathers play a role in the pregnancy and the birth of their child, they may form heightened attachments to their child that carry forward in the following years. Such attachments may be particularly important for fathers without daily, residential contact with their children. In contrast, for resident fathers, the link between early participation and later involvement functioned through parental conflict. A greater show of commitment and participation during pregnancy and birth may enhance the sense of cooperation between parents, decreasing later conflict and thereby helping to support continued father involvement down the road. Increasing fathers’ participation around the

time of a child’s birth presents a potential area for intervention and opportunity to assess causative effects.

In contrast to the importance of past parental experiences, fathers’ current child-rearing experiences were not significant correlates of father involvement. Contrary to predictions, whether fathers’ lived with additional children or had additional biological children in other households did not significantly predict father involvement with the focal child in this sample. Little research has comprehensively assessed how low-income fathers split their resources and paternal attention among multiple children, an important issue to understand as multiple-partner fertility continues to increase in the United States (Mincy, 2002).

Fathers’ human and financial capital characteristics. In addition to the relational measures, a number of other father, mother, and child characteristics related to fathers’ engagement in positive parenting behaviors. It is notable that human and financial capital

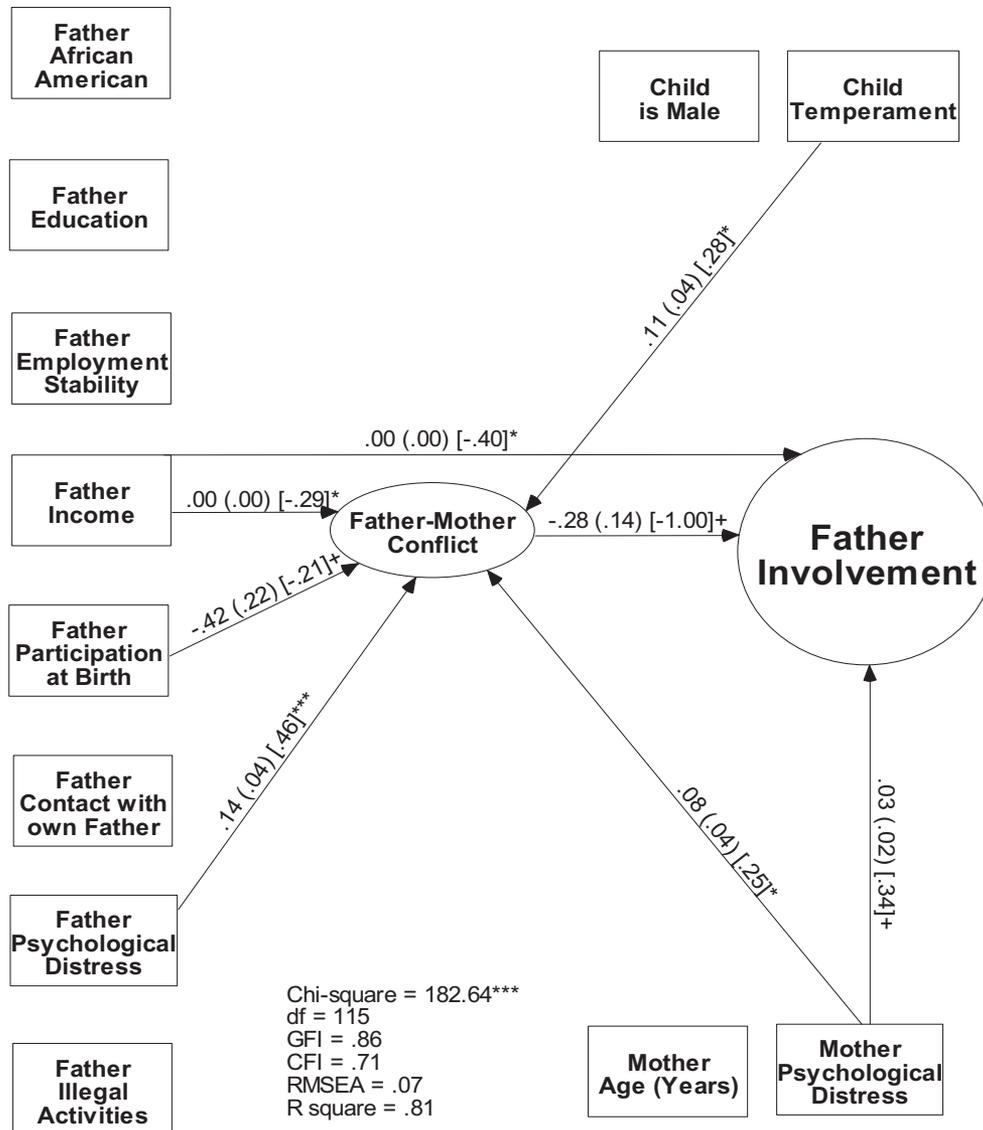


Figure 3. Path model of father involvement for the residential father sample ($n = 119$). Numbers represent unstandardized path coefficients, with standard errors in parentheses and standardized coefficients in brackets. Nonsignificant paths are not shown. df = degrees of freedom; GFI = goodness-of-fit index; CFI = comparative fit index; RMSEA = root-mean-square error of approximation. $†p < .10$. $*p < .05$. $***p < .001$.

characteristics of mothers showed no significant relations, either direct or indirect, with father involvement in this sample. Fathers' race/ethnicity also was not a significant correlate of father involvement in this sample, nor were differences found across African American and Latino fathers in the measurement model of father involvement.

In contrast, results highlight the important and complex role of fathers' human capital characteristics and problem behaviors. Rather than functioning monolithically, fathers' employment stability, education, and income related to father involvement in distinct ways. Fathers' employment stability—assessed with a measure that incorporated both current work effort and the history and consistency of fathers' employment—was a positive correlate

of father involvement that was largely mediated through parental conflict for nonresident fathers. This finding extends past research that has indicated the central role of fathers' current work experiences. Fathers' employment history over months and years may set expectations and patterns of interactions between parents that are sustained over time. When fathers are unemployed or inconsistently employed, they may feel that they have inadequate resources to share with their child or that they do not fulfill societal expectations of a central paternal role; in addition, mothers may react negatively to fathers' lack of employment and financial resources, refusing access to children (Nelson et al., 2002). From both parents, then, reactions may heighten conflict. However, greater employment stability showed a nonsignificant but negative direct

relation to father involvement for resident fathers. In addition, we found a substantial negative direct effect of fathers' income on resident fathers' involvement, perhaps reflecting more traditional gender roles or more limited time and energy for parenting. Although greater income related directly to lower father involvement, this was largely counteracted by a positive indirect path to father involvement through lowered parental conflict.

In short, these results show a complex and intricate pattern of relations among fathers' human and financial capital and their parenting involvement. Although scholarship indicates that fathers' human capital and financial capital serve as important resources for children that promote healthy cognitive and psychosocial development (e.g., Amato, 1998), the current results suggest that this capital can both support and prohibit resident fathers' active involvement with their children. As economic theory notes (Becker, 1991) and most parents are well aware of, trade-offs abound between market work and economic solvency, on one hand, and time and energy to devote to children, on the other. Although most research in this area has assessed mothers' experiences, the current results suggest that fathers, too, experience such conflicts.

Parents' psychosocial problems. Another central set of results concerns the role of parents' psychosocial problems, in particular engagement in illegal activities, such as drug use and violence, and psychological distress. For mothers, psychological distress was significantly related to father involvement. It is interesting, however, that the direct and indirect paths counteracted each other. Greater psychological distress in mothers predicted heightened parental conflict in both resident and nonresident father families, extending past research with primarily middle-class married couples (e.g., Cummings et al., 2005; Papp et al., 2004). However, this negative indirect path between maternal psychological distress and father involvement was counteracted, particularly in resident father families, by a positive direct path. In short, when mothers suffer from greater psychosocial problems, fathers appear to step in with more involved parenting.

For fathers, in contrast, psychological and behavioral problems showed different patterns across resident versus nonresident father families. Among coresiding couples, the psychological distress of fathers functioned similarly to that of mothers, predicting heightened parental conflict and hence lower father involvement. In nonresident father families, fathers' engagement in antisocial behaviors predicted lower father involvement indirectly through heightened parental conflict. It is possible that mothers use parental conflict and gatekeeping as a mechanism to decrease access to children when fathers' show substantial psychosocial problems. Recent research suggests that when fathers engage in high levels of antisocial behaviors, greater father involvement predicts more conduct problems in children (Jaffee et al., 2003). Hence, heightened parental conflict and resulting lower father involvement may play a protective role for children whose father engages in illegal or antisocial activities.

Child characteristics. Similar to mothers' characteristics, characteristics of children played a limited role in understanding fathers' involvement. Within the truncated range of 2- to 4-year-olds, child age was not a significant predictor of father involvement. Child gender showed mixed results. Among nonresident father families, a male focal child predicted increased parental conflict and hence lower involvement but also was linked directly

with slightly higher father involvement. Such counteracting effects may help to explain the lack of child gender differences in many studies. Finally, among resident fathers only, a more difficult child temperament predicted greater parental conflict and, in turn, lower father involvement, replicating previous research with married middle-class families (McBride et al., 2002). Given that mothers' perceptions of child temperament were used in this study, future efforts should seek to unearth how paternal perceptions of children may influence fathers' patterns of involvement with their children.

Limitations and Data Considerations

Although the results from these analyses add to the complexity of information on correlates of father involvement for low-income resident and nonresident fathers, cautions are necessary. Perhaps the most central issue is the selectivity of the sample, which can lead to biases in the information portrayed. Although the full sample of the Three-City Study was randomly selected and representative of low-income families in low-income neighborhoods in the three cities, fathers represented a much more restricted group. The use of sampling weights in a subset of the analyses indicated that weighting for nonresponse as well as other sampling criteria did not change the results. Nonetheless, because of the selectivity of the sample, caution is warranted. Analyses with a sample that represented the full range of father involvement might provide different results. As one possible example, involvement with illegal activities, parental conflict, and having other biological children might have been more important predictors of father involvement among the fathers who were not accessed. The issues of sample selectivity and low response rates, common to nearly all studies of low-income fathers, also remind us that much more work is needed on identifying mechanisms to access representative samples of fathers.

A second issue concerns directionality and causation. Data in this study were derived from one wave of interviews and provide a snapshot view of complex and often fluid family processes and behaviors. Hence, the results should be interpreted cautiously, and multiple interpretations should be considered. For example, positive links between employment stability or psychosocial well-being and father involvement might indicate that active fathering provides an incentive for men to retain gainful employment and disengage from antisocial activities (e.g., Jarrett et al., 2002; Nelson et al., 2002) or that active involvement with children enhances psychological well-being. Further work is needed to assess bidirectional relations between paternal well-being and parenting and to explore how such relations evolve over time.

Policy Implications and Summary

These findings inform current policy and intervention discussions concerning low-income and unmarried fathers. In short, the findings indicate the centrality of taking a holistic view of family relationships and of barriers and supports to father involvement. Attention to men's economic stability, psychosocial health, and early commitment to children appears centrally important. In addition, although the complexity and fluidity of parental relationships among low-income parents should not be underestimated, results suggest the need to develop mechanisms and efforts that seek to increase parents' ability to work cooperatively and col-

laboratively when the goal is increased involvement and commitment from fathers. In addition, one must keep in mind that some fathers (e.g., those exhibiting high antisocial behaviors; Jaffee, Caspi, Moffitt, Taylor, & Dickson, 2001) may be a more detrimental than supportive influence on their children and that not all families may benefit from high levels of paternal involvement.

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