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Nonresident Fathers' Contributions to Adolescent Well-Being

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Abstract

Using data from 453 adolescents in Wave 2 of the National Survey of Families and Households, we examine how multiple dimensions of nonresident father involvement are associated with different dimensions of child well-being. Father-child relationship quality and responsive fathering are modestly associated with fewer externalizing and internalizing problems among adolescents. The quality of the mother-child relationship, however, has stronger effects on child well-being. Nevertheless, even if adolescents have weak ties to mothers, those who have strong ties to nonresident fathers exhibit fewer internalizing problems and less acting out at school than adolescents who have weak ties to both parents. Adolescents are worst off on a range of outcomes when they have weak ties to both their mothers and nonresident fathers.

Keywords

child/adolescent well-being; divorce; father-child relations; nonresident parenting

Past research has demonstrated the many disadvantages faced by children who grow up apart from their fathers (Amato, 2000; McLanahan & Sandefur, 1994). Although half of all U.S. children face this situation for some period during their childhood (Bianchi, 1990), a father's absence from the household does not necessarily mean that he is absent from his child's life (King, 1994a). A significant number of nonresident fathers still maintain ties with their children (Amato & Sobolewski, 2004), although the dynamics and consequences of this relationship are not well understood. Increased attention is needed to understand the role of nonresident fathers in their children's lives and the ways in which involvement by nonresident fathers can promote child well-being (King, 1994b).

The primary aim of this study is to assess how multiple dimensions of nonresident father involvement are associated with different dimensions of adolescent well-being. Prior research in this area has had one or more significant weaknesses that have limited our understanding including the use of small and unrepresentative samples (e.g., Simons, Whitbeck, Beaman, & Conger, 1994), reliance on limited measures of nonresident father involvement (e.g., Greene & Moore, 2000), exclusive reliance on mothers' reports of nonresident fathers' involvement with their children (e.g., King & Heard, 1999) or use of a single reporter for both nonresident father involvement and child outcomes (e.g., Manning & Lamb, 2003), failure to simultaneously consider the role of the mother-child relationship (King, 1994a), failure to consider whether the effects of nonresident father involvement are the same for different groups of children (e.g., Stewart, 2003), the exclusion of children who have little or no contact with their fathers (e.g., Simons et al., 1994) thereby omitting those with the lowest levels of nonresident father involvement, and the exclusion of children born outside of marriage (e.g., Buchanan, Maccoby, & Dornbusch, 1996) thereby omitting a growing number of children with nonresident fathers. Nearly a third of children are now born outside of marriage (Ventura & Bachrach, 2000).

The present study addresses each of the above limitations. Whereas prior national research has frequently focused on nonresident father contact and payment of child support, we pay particular attention to the quality of father-child ties and father's responsive parenting, aspects of the non-resident father–child relationship that recent research indicates may have greater benefits for child well-being (Amato & Gilbreth, 1999). Using nationally representative data from Wave 2 of the National Survey of Families and Households (NSFH), we have adolescent reports of the father-child relationship (with mother reports of child support) and we examine child outcomes from the perspective of both mothers and the adolescents themselves. This is an important advantage because prior research demonstrates that information varies by source. For example, custodial mothers may underestimate the father's involvement (Lin, Schaeffer, Seltzer, & Tuschen, 2004; Seltzer & Brandreth, 1994). With the exception of child support payments where mothers are more appropriate respondents than children, adolescents should be in a better position than their mothers to report on their father's involvement in their lives. Having mother reports for several well-being measures allows us to use separate reporters for several of our predictor and outcome variables, thereby avoiding common method variance that can lead to overestimating the true association between them.

We include children who have little or no contact with their nonresident fathers, and both children whose parents have divorced and children whose parents were never married, providing a more accurate picture of nonresident fathering. In assessing the role of nonresident father involvement for child well-being, we consider the role of the mother-child relationship in order to better understand the unique and relative contributions that nonresident fathers can make toward child well-being. We also address the issue of whether children benefit most when they enjoy close relationships with both parents or whether close ties to at least one parent is what makes the crucial difference.

Finally, we examine whether the importance of the father-child relationship for child well-being is the same for different groups of children. Do all children appear to benefit equally from having high-quality ties to nonresident fathers, or do some children appear to benefit more than others? For example, do boys benefit more than girls because their fathers are especially important as role models? Perhaps, adolescents benefit more from supportive ties to nonresident fathers when they have other characteristics that place them at a disadvantage such as being born outside of marriage or having parents with low education or income. Adolescents with other sources of advantage may derive less additional benefit from father involvement.

With half of all U.S. children growing up in households without their fathers, it is crucial that researchers begin to systematically assess the extent to which specific child outcomes are influenced by specific forms of nonresident father involvement (Tamis-LeMonda & Cabrera, 1999). By focusing on multiple dimensions of father involvement and child well-being while also considering the role of the mother-child relationship, and by considering the importance of father involvement for different groups of children using national data, our study provides a stronger test of the link between nonresident father involvement and child well-being than has been conducted to date. To our knowledge, no other published study of nonresident father involvement and child well-being has this important combination of strengths.

Nonresident Father Involvement and Child Well-Being

Social capital (Coleman, 1988, 1990) is inherent in the parent-child relationship and serves as a resource that can benefit children's development, although parents must be available to and involved with their children for children to benefit from it (Amato, 1998). The transfer of social capital between nonresident fathers and their children can be measured by both the quality and quantity of involvement (Furstenberg & Hughes, 1995), although research indicates that not all forms of nonresident father involvement are equally beneficial for child well-being.

Early research on nonresident fathers often was predicated on the assumption that frequent father contact benefits children (King, 1994a). Father involvement in two-parent families is associated with child well-being on an array of measures (Lamb, 1997; Marsiglio, Amato, Day, & Lamb, 2000), and it was assumed that nonresident fathers who maintained frequent contact could mitigate some of the negative consequences associated with their absence from the household (King & Heard, 1999). Evidence supporting this assumption, however, has been limited. Most studies using large national surveys have found little or no association between nonresident father visitation and child well-being (Amato & Gilbreth, 1999; Furstenberg, Morgan, & Allison, 1987; King, 1994a).

Stronger evidence exists for the importance of child support payments. The payment of child support by nonresident fathers can alleviate some of the economic disadvantage faced by single-mother households and provide a less stressful home environment for children. Although not significant for all measures of well-being, a few studies report a modest but positive link between the payment of child support and children's behavioral adjustment (Furstenberg et al., 1987; McLanahan, Seltzer, Hanson, & Thomson, 1994) and academic achievement (Argys, Peters, Brooks-Gunn, & Smith, 1998; King, 1994a).

More recent evidence suggests that intensive types of involvement beyond mere contact are especially important for children's welfare. In particular, the warm, supportive, and close ties that characterize high relationship quality and the responsive, negotiated control that characterize authoritative parenting practices (Baumrind, 1991) appear to promote child well-being and positive child development (Amato & Gilbreth, 1999; Marsiglio et al., 2000). High-quality father-child ties may be particularly important for child well-being because fathers who develop close affective bonds with children can be more effective in monitoring, teaching, and communicating with children, thereby allowing the social capital inherent in the father-child relationship to be realized (Amato, 1998; King, Harris, & Heard, 2004). Contact alone does not guarantee that this will occur. Many nonresident fathers engage in leisure activities such as taking their children to restaurants and movies but fail to engage in responsive parenting or other authoritative practices, such as talking about problems or setting limits (Amato & Gilbreth; Stewart, 1999). Not sharing a residence with children makes it difficult for men to enact the parental role. Some highly motivated nonresident fathers, however, find ways to act like authoritative parents rather than adult companions, and they maintain close, supportive ties to their children, and their children appear to benefit when they can do so (Amato & Gilbreth). Few studies, however, have considered if or when such aspects of the father-child relationship influence child well-being, and these studies are often based on small, unrepresentative samples. Furthermore, as we discuss later, most studies do not take the mother-child relationship into account to assess whether nonresident fathers make a unique contribution to child well-being.

Thus, in addition to contact and child support, we examine two other dimensions of father-child ties: relationship quality and responsive parenting. Our measure of relationship quality includes items that tap both the general quality of the relationship as well as indicators of how important the father appears to be in the child's life (e.g., how likely the child would talk to the father if depressed). This multiple-item measure is a more comprehensive indicator of the quality of nonresident father–child relations than the more typically used single-item measure of closeness found in some national surveys (e.g., the National Longitudinal Study of Adolescent Health). Our measure of responsive parenting indicates how often fathers consider the child's viewpoint and explain reasons for decisions to the child. This aspect of parenting has been largely neglected in prior studies of nonresident father involvement and child well-being, but research on two-parent families suggests that when parents discuss and explain rules and decisions to their adolescents, adolescent cognitive and social competencies are enhanced (Steinberg & Silk, 2002).

Of the four dimensions of nonresident father involvement considered, we hypothesize that relationship quality and responsive parenting will have the strongest direct effects on child well-being. Given prior research, we do not expect contact to have much direct influence on child well-being, although it may have significant indirect effects through promoting high-quality ties and responsive parenting practices. Contact provides opportunities for nonresident fathers to engage in active forms of parenting. Homans (1951/1992) theorized that the more frequently people interact with one another, the greater in general their affection or positive sentiment for one another. Conversely, if interaction is infrequent, affection will be weak. Two studies of married individuals provide empirical support for this proposition (White, 1983; Zuo, 1992). In a prior study using the NSFH (Sobolewski & King, 2005), we discovered that nonresident father contact was strongly associated with both better quality father-child relationships and more responsive parenting practices. (In the current study, we also examined the possibility that the effect of contact could be moderated by the quality of the father-child relationship. It may be that contact will only be beneficial in the context of a high-quality father-child relationship. A test of this interaction effect in preliminary models, however, was not significant.)

We also hypothesize that child support will be less strongly associated with child well-being, given that prior research finds that its influence is generally modest and limited to certain outcomes. In addition, child support may be most important in the early years after parental separation when even small amounts may be crucial in helping single mothers and their children given the precipitous decline in household income that they often experience (Arendell, 1986). As time passes, the mother's economic situation may improve with her own labor force participation or if she remarries, and child support may be less consequential for adolescent well-being. The average length of time since the adolescents in our sample lived with both their parents is 10 years. In assessing the importance of nonresident father involvement, however, it is important to control for the payment of child support because it is positively associated with father contact (Seltzer, 2000), and it is likely to be associated with high-quality ties and responsive parenting as well (Stewart, 2003).

Nonresident father involvement may not be equally important for all types of outcomes (e.g., as the research on child support suggests). It is essential, therefore, to consider multiple dimensions of child well-being. We focus on five important indicators of well-being. Internalizing problems (depression and other symptoms of distress) and externalizing problems (antisocial or aggressive behavior) are central components of well-being that developmentalists have identified and studied extensively (Achenbach & McConaughy, 1997). A focus on both externalizing and internalizing behavior allows us to assess gender-typical problems for boys and girls. There are significant gender differences in mental health and emotional problems, with girls exhibiting higher rates of internalizing problems and boys exhibiting higher rates of externalizing problems (Skaggs & Jodl, 1999).

Academic performance, as indexed by grades, is another core dimension of child well-being that is predictive of educational attainment and other outcomes, such as health, over the life course (Moore, Evans, Brooks-Gunn, & Roth, 2001; Ross & Wu, 1995). Acting out at school (e.g., disobedience, cutting classes) can also compromise academic achievement and educational attainment. Finally, child well-being encompasses positive dimensions as well as the absence of negative dimensions. Previous research on the effects of divorce (e.g., McLanahan & Sandefur, 1994) and of nonresident father involvement (e.g., Amato & Rezac, 1994) on child well-being has overwhelmingly focused on negative child outcomes such as behavioral problems, delinquency, and dropping out of school. Less is known about the influence of nonresident father involvement on positive outcomes such as self-efficacy or perceived control over one's life (Moore et al., 2001). Self-efficacy and other indicators of positive self-regard are essential components of mental health that are linked with successful

adjustment and the avoidance of risk behaviors (Bergman & Scott, 2001; Lewis, Ross, & Mirowsky, 1999).

Is Nonresident Father Involvement More Beneficial for Some Children Than for Others?

The lack of significant effects for nonresident father visitation on child well-being has led some researchers to speculate that although it does not appear in the aggregate, father involvement may be more important for certain subgroups of children. In particular, researchers have speculated that boys might benefit more from nonresident father involvement than girls (Coley, 1998; Furstenberg & Weiss, 2000; Furstenberg et al., 1987). Consistent with this notion, a social learning perspective views identification and imitation as crucial processes in child socialization and development (Lamb, 1981). Although both parents can play important roles, fathers may be especially important as role models for their sons. Evidence for the differential effects of nonresident father involvement by child's gender has not been strong (Amato & Gilbreth, 1999; Furstenberg et al.; King, 1994b; but see Amato & Rezac, 1994, for an exception). Most of these studies, however, have been limited to a consideration of father contact or child support.

Prior studies examining other moderating effects have failed to find significant differences in the effects of contact or child support on child well-being on the basis of child's race, whether the child was born within marriage, the time since the parental separation, the mother's education, the mother's income, or the mother's marital status (Amato & Rezac, 1994; Furstenberg et al., 1987; King, 1994b). The expected direction of effects is less clear for such moderators than for gender. On the one hand, children may benefit disproportionately from supportive ties to non-resident fathers when they have other characteristics that place them at a disadvantage including being born outside of marriage, living in a single-mother household, being a member of a minority group, low household income, and low parental education. Older adolescents may also be more vulnerable than younger adolescents as they are more at risk for exhibiting many types of behavioral problems, particularly delinquency and risk behaviors. For such disadvantaged adolescents, the involvement of their nonresident fathers may make a crucial difference for their well-being, whereas children with other sources of advantage may derive less additional benefit from father involvement. On the other hand, ties to nonresident fathers may not be enough to compensate in the lives of disadvantaged children, particularly given that levels of nonresident father involvement tend to be fairly modest on average. Thus, any positive influence of father involvement may be relatively inconsequential, given the many stressful conditions that disadvantaged children face (McLoyd, Cauce, Takeuchi, & Wilson, 2000).

Our study clarifies whether certain subgroups of children benefit more than others from nonresident father involvement by examining its importance for multiple dimensions of both nonresident father involvement and child well-being. In addition to child's gender, we consider child's race, child's age, whether the child was born in marriage, whether a stepfather is present, parental education, and household income.

The Role of Mothers

In assessing the influence of nonresident father involvement, it is important to separate the effects of father involvement from the effects of the mother-child relationship, as well as from the effects of family characteristics that are associated with patterns of fathering (Harris, Furstenberg, & Marmer, 1998). Any positive effect of a high-quality father-child relationship, for example, may be confounded with the quality of the mother-child relationship as they are positively correlated (Buchanan et al., 1996; White & Gilbreth, 2001). Do nonresident fathers make a unique contribution to their child's well-being, or is the mother-child relationship what matters most? Mothers are more often the primary parenting figure in children's lives both

before and after divorce (Pleck, 1997; Seltzer, 1994), and it may be the mother-child relationship that is most consequential for child outcomes (Harris et al., 1998). Certainly, numerous studies report that the relationship between the mother and her child and the effectiveness of a mother's parenting after divorce are important correlates of child well-being (Amato, 2000).

The mother-child relationship is often not assessed or controlled for in studies of the effects of nonresident father involvement, although six studies of adolescents do so and are particularly suggestive in this regard. Simons et al. (1994) report that engagement in authoritative behaviors (e.g., providing emotional support, praising children's accomplishments) by nonresident fathers was associated with fewer externalizing problems among adolescents but was unrelated to internalizing problems. Results, however, were based on a small, largely rural sample of Iowans in which either the mother or adolescent had seen the father within the prior 3 months. Buchanan et al.'s study (1996) of adolescents in California revealed that the closeness of the nonresident father–adolescent bond made a positive, albeit small, contribution to adolescent adjustment for two of their five outcome measures (depression, severity of the adolescent's "worst" problem).

In the first study with national data to address this issue, however, Furstenberg et al. (1987) found closeness to nonresident fathers to be unrelated to a variety of well-being measures using adolescent, mother, and teacher reports in the National Survey of Children. More recently, White and Gilbreth (2001) found that adolescents in the NSFH who reported good relationships with their nonresident fathers scored significantly lower on both externalizing and internalizing problems than adolescents who had no relationship at all with their fathers. There was little difference, however, between adolescents who reported good relationships and those who reported weaker ones.

Evidence for the importance of father-child closeness also comes from analyses of the National Longitudinal Study of Adolescent Health. Stewart (2003) found adolescent reports of closeness to nonresident fathers to be associated with their reports of less emotional distress, although there was no association with reports of delinquency or grades. Other individual-item measures of leisure activities and aspects of authoritarian parenting (e.g., discussing problems) were generally not related to better outcomes. Manning and Lamb (2003) report significant associations between nonresident father–child closeness and five of their six well-being measures in the domains of behavioral problems and academic achievement. Although this study may appear to provide the strongest evidence for the importance of nonresident father involvement, we note that of the five significant associations, three are only at the $p < .05$ level and are based on a large sample of 5,504 adolescents, suggesting rather modest effects.

Taken together, these studies provide some limited evidence that nonresident father–child closeness and authoritative parenting practices may contribute to adolescent well-being independently of the mother-child relationship. All these studies, however, also report that the quality of the mother-child relationship has a stronger, more consistent effect on adolescent well-being than the father-child relationship. Thus, we consider the quality of the mother-child relationship when assessing the influence of nonresident father involvement on child outcomes. We hypothesize that a close relationship to both mothers and non-resident fathers will be positively associated with child well-being, although we also expect stronger effects for closeness to mothers than to non-resident fathers.

Beyond the direct influence of both mothers and fathers, interactive processes may also be important. Children may benefit most when they have highly involved mothers and fathers and may be worst off when ties to both are weak. It is unknown whether nonresident father involvement is especially beneficial if a mother's involvement with her child is low, or if the

mother-child relationship is what matters most, regardless of ties to nonresident fathers. In the only study to address this issue, Buchanan et al. (1996) found that adolescents who reported close relationships with both parents were doing somewhat better in terms of adjustment, compared with adolescents who had a close relationship with only their nonresident fathers or who had poor relationships with both parents. There was no difference between adolescents who were close to both parents and adolescents who were only close to the resident mother.

We examine whether these kinds of interactive processes are evident by comparing children who have strong ties to both parents to those who have strong ties only to mothers, only to nonresident fathers, or to neither parent. We hypothesize that adolescents will be worst off when ties to both parents are weak. What is less clear is whether close ties to both parents confers additional benefits over being close to only one parent and whether it matters if the one parent is the mother or the nonresident father.

Control Variables

We include measures in our models for characteristics that are associated with both child well-being and nonresident father involvement. Parental education and family income are positively associated with child well-being (Bornstein & Bradley, 2003; Yeung, Linver, & Brooks-Gunn, 2002). In part because of greater economic and social disadvantages, children born outside of marriage (Seltzer, 2001) and Black children (Farkas, 2004) are at greater developmental risk than children born within marriage and White children. Black children, however, do not uniformly rank lower on all dimensions of well-being. For example, although Blacks often score lower than Whites on measures of academic performance (Farkas), Black adolescents often report higher self-efficacy (Lewis et al., 1999).

Children who gain a stepfather are advantaged in terms of greater economic resources, which should enhance their well-being, but other problems associated with stepfamilies (e.g., stresses involved in family reorganization) sometimes results in fewer advantages over single-mother families than might be expected (Amato, 2000; Coleman, Ganong, & Fine, 2000). Boys tend to experience greater externalizing problems and lower academic achievement, whereas girls tend to have more internalizing problems and lower self-efficacy (Allison & Furstenberg, 1989; Bergman & Scott, 2001). Age differences are also apparent in levels of child well-being. Although greater maturity can lessen the incidence of some types of behavior problems, engagement in delinquency and risk behaviors generally increase during adolescence (Kann et al., 2000). Research is mixed with regard to whether child well-being improves with time following divorce. Some studies report that children show improvements in well-being a year or two after divorce, but others show persistent or delayed effects of divorce on child outcomes (Amato, 2000).

The above factors are also linked to nonresident father involvement, although findings are sometimes mixed and can also vary depending on the type of father involvement. Socioeconomic resources, particularly the father's education, are generally associated with nonresident father involvement (King et al., 2004). Children born outside of marriage have significantly less involved nonresident fathers (King et al.). Time since divorce or separation is also associated with declining father involvement (Seltzer, 2000). A mother's remarriage has sometimes been found to be associated with lower levels of father involvement (Hofferth, Pleck, Stueve, Bianchi, & Sayer, 2002; Seltzer, 1991).

Some studies find that nonresident father involvement is higher with sons than daughters (Hetherington, Cox, & Cox, 1982; King et al., 2004; Manning & Smock, 1999), but other studies find no association (Cooksey & Craig, 1998; Seltzer, 1991). Involvement by nonresident fathers tends to decline generally during adolescence, although some activities such as talking with fathers about problems can become more frequent (King et al.).

Inconsistent effects of race on father involvement are reported in the literature. Some studies find that Black fathers are more involved than non-Blacks (e.g., King, 1994b; King et al.; Seltzer, 1991), but others find no difference (e.g., Seltzer & Bianchi, 1988).

Overview

We extend current knowledge about the importance of nonresident father involvement by considering a wider range of fathering behaviors and child outcomes than most prior studies, which more frequently focus on contact and child support. We do not rule out the importance of contact but assess its potential influence as an indirect predictor of child well-being through relationship quality and responsive parenting. Moreover, we use national data and rely on child, rather than mother, reports of the father-child relationship. We also examine whether nonresident father involvement is more beneficial for some children than for others. Finally, this is one of the few studies to include the role of the mother-child relationship when assessing the importance of nonresident father involvement in children's lives.

Method

Sample

Our analysis is based on data from the second wave of the NSFH. The first wave (NSFH1) contained a national probability sample of 13,007 adults aged 18 or older living in U.S. households who were interviewed between 1987 and 1988 (see Sweet, Bumpass, & Call, 1988; Sweet & Bumpass, 1996, for a detailed description of the data). The sampling design oversampled several groups including minorities, single parents, and cohabitors. The response rate was 74%. Follow-up interviews were conducted with 10,007 of the original respondents between 1992 and 1994 (NSFH2).

In Wave 1, 1,892 parents answered a set of questions about a randomly selected focal child between the ages of 5 and 11. Over 1,500 of these parents were reinterviewed 5 – 7 years later in Wave 2, and permission was requested to interview the child by telephone. Interviews were completed with 1,415 children who were between the ages of 10 and 18. White and Gilbreth (2001) report that comparing the Time 1 characteristics of parents whose children were and were not interviewed shows a pattern of attrition that is similar to that for the larger NSFH sample.

Using the second wave allows us to use child reports of the nonresident father–child relationship, as well as to have measures of child well-being from the perspective of both the child and the mother. All reported descriptive statistics (means, standard deviations, and percentages) are weighted for national representativeness (using the Wave 2 individual sample weight). The number of cases reported, however, refers to the unweighted sample.

Our sample includes only those focal children who lived with their mothers and had a father living elsewhere in Wave 2 (n = 456). Two of the focal children were older than 18 years of age by the time of their interview, and another was under 10 years of age. These three cases were excluded, resulting in a final sample size of 453. The sample includes both children whose parents were once married and divorced or separated, and children whose parents were never married.

To deal with possible bias resulting from attrition between the first and second waves, we employed Heckman's (1979) method. We first constructed a regression equation using several demographic variables to predict attrition from the sample. Attrition was higher for Blacks, Hispanics, and Asian Americans than for Whites, and was significantly greater among men, those who were older, were widowed, had lower education and less income, had never owned a home, and had no children. We then used these predictors to calculate lambda, which is the

predicted probability of dropping out of the study for all of the original respondents. This lambda served as a control in our analytic models.

Analysis Strategy

We use structural equation modeling (SEM) to test our hypotheses (Arbuckle & Wothke, 1999). SEM offers several advantages over traditional multiple regression. In particular, SEM is confirmatory, allowing us to specify a theoretical model, estimate it, and evaluate how well our theoretical model fits the observed data. SEM also allows us to incorporate measurement error into the equations, thereby isolating measurement error in our models. Another benefit of SEM is that it allows us to directly test models with multiple dependent variables and to simultaneously control for the relationships between them. Finally, SEM makes it easy to test the model for group differences.

In reporting the significance levels of the coefficients in our models, we rely on the traditional two-tailed test. It could be argued, however, that a one-tailed test of significance is appropriate, given that our hypotheses do suggest a specific relationship direction (i.e., nonresident father involvement will be associated with greater child well-being). We therefore report findings that are significant at the .10 level because a coefficient significant at the .10 level in a two-tailed test would be significant at the .05 level in a one-tailed test.

Measures

Most measures described below were treated as unidimensional latent variables, which we constructed using confirmatory factor analyses with the Analysis of Moments Structure (AMOS) software (Arbuckle & Wothke, 1999). We conducted a series of analyses to arrive at the measurement model with the best fit, the result of which is described in further detail in the results section. Although additional items other than those utilized here were available for several of our latent variables, including those reduced the fit of the model.

Child outcomes—For our analyses, we considered five child outcomes, two of which were reported by the focal child, including *grades* and *self-efficacy*. The first was a single item asking children what kind of grades they mostly received (1 = *Fs*, 8 = *mostly As; M* = 5.66, *SD* = 1.71). Self-efficacy was measured as a latent construct tapping two items that asked children (1 = *strongly disagree*, 4 = *strongly agree*) if they felt they had control over things that happened to them (*M* = 2.91, *SD* = .84) and if they felt they could change the important things in their lives (*M* = 2.86, *SD* = .76).

The custodial mothers reported on adolescent *externalizing problems*, *internalizing problems*, and *acting out at school*. Reports (1 = *not true*, 3 = *often true*) of whether the child bullies others (*M* = 1.33, *SD* = .53), has trouble getting along with other children (*M* = 1.32, *SD* = .52), disobeys at home (*M* = 1.56, *SD* = .60), has a strong temper and loses it easily (*M* = 1.54, *SD* = .66), acts impulsively (*M* = 1.68, *SD* = .67), and is overly active or restless (*M* = 1.53, *SD* = .69) served as observed indicators of the latent construct representing externalizing problems in the past 3 months. To assess a latent construct representing internalizing problems in the past 3 months, we relied on reports (1 = *not true*, 3 = *often true*) of whether the child feels worthless or inferior (*M* = 1.38, *SD* = .54), has sudden changes in mood or feeling (*M* = 1.91, *SD* = .59), is unhappy or depressed (*M* = 1.38, *SD* = .52), is fearful or anxious (*M* = 1.40, *SD* = .58), and is nervous or high strung (*M* = 1.54, *SD* = .67). Finally, the latent construct representing acting out at school was measured using mother's reports (1 = *yes*, 0 = *no*) of whether the child had cut class in the last year (*yes* = 13%), whether the mother had been asked to meet with the principal or a teacher because of the child's behavior in the last year (*yes* = 18%), and whether the child was disobedient at school in the last 3 months (1 = *not true*, 3 = *often true*; *M* = 1.32, *SD* = .55).

Nonresident father involvement—We relied on the adolescents' report of father-child contact, which was measured with two items asking how often (1 = *not at all*, 6 = *several times a week*) in the last year the adolescents (a) had seen their father in person (*M* = 3.38, *SD* = 1.68) and (b) had talked on the phone or received a letter from their father (*M* = 3.72, *SD* = 1.86). We used these two items as observed indicators of a latent construct representing father-child contact. Similar to other research, we find great variation in the amount of contact. A sizable minority of adolescents in our sample have quite frequent contact with their fathers, with 29% seeing their fathers in person at least once per week, and 41% reporting talking on the phone or receiving letters at least once per week. A significant number (19%), however, report no contact of any kind with their father in the last year, 22% report no in-person contact, and 24% report no contact by telephone or mail.

We relied on mothers' reports of the amount and forms of monetary support the father paid in the last year. For our main analyses, we constructed a dichotomous observed variable reflecting whether or not (1 = *yes*, 0 = *no*) the father paid at least some kind of support, including not only child support but also paying for various child expenses (*yes* = 62%). We also tested alternative father support variables, including the amount of child support paid (*Mdn* = $775 per year; median payment for those who paid anything = $2,400 per year), the proportion of the ordered amount of child support that the father paid (50% paid the ordered amount or more), and a scale reflecting the number of ways (0 = *none*, 4 = *four ways*) the father provided support to the child (*M* = 1.01, *SD* = .99), such as child support payments (*yes* = 59%), paying medical insurance (*yes* = 28%), uninsured medical expenses (*yes* = 14%), and other expenses (*yes* = 2%). Because the item reflecting the amount of support paid was so skewed (skewness = 7.91), and because none of the alternative measures of support other than child support payments was related to child outcomes, we used the item reflecting whether the father provided at least some form of monetary support in our final models. (Alternative analyses using the item reflecting whether the father paid some child support—rather than any form of support—yielded nearly identical results.)

Father-child relationship quality was assessed with five items reported by adolescents. Two items asked adolescents how likely it was (1 = *definitely wouldn't*, 5 = *definitely would*) that they would talk to their father if they felt depressed or unhappy (*M* = 2.73, *SD* = 1.43) or if they had a major decision to make (*M* = 3.01, *SD* = 1.51). Adolescents were asked to rate how much they admired their father (0 = *not at all*, 10 = *a tremendous amount*; *M* = 7.30, *SD* = 2.79) and their overall relationship with the father (0 = *really bad*, 10 = *absolutely perfect*; *M* = 6.93, *SD* = 2.95). Finally, adolescents also reported how often (1 = *never*, 5 = *almost every day*) their father praised or complimented them (*M* = 2.51, *SD* = 1.35). All five items were used as observed indicators of a latent construct representing fatherchild relationship quality. Adolescents who had no contact with their nonresident fathers had missing values for the measures of relationship quality. We assigned these cases the lowest value on the items assessing the adolescents' likelihood of talking to the father if they felt depressed or had a major decision to make, as well as the item reflecting how often the father praised the child. For the items measuring overall relationship quality and how much the adolescent admired the father, however, we left these cases coded as missing because, unlike the other three measures of father-child relationship quality, these two items were not necessarily dependent on recent contact.

Responsive fathering was measured with adolescent reports of how often (1 = *never*, 5 = *all the time*) their father explained his reasons to them when he wanted them to do something or not to do something (*M* = 2.69, *SD* = 1.56); how often, when the father had decisions to make about things that affect the adolescent, he talked it over with them first (*M* = 2.68, *SD* = 1.53); and how often their father changed his mind because of what the child wanted or thought would be best (*M* = 2.23, *SD* = 1.23). These three items served as indicators of the latent construct

representing responsive parenting. Adolescents who had no contact with their father were assigned the lowest value on these three items. Similar to the findings for contact, there is wide variation in levels of father-child relationship quality and responsive fathering, with significant numbers of families at both extremes.

The mother-child relationship—We treated mother-child relationship quality as a latent construct indicated by five items reported by adolescents that were identical to those asked about the father-child relationship, including how likely the child would talk to the mother if they were depressed or unhappy ($M = 3.63$, $SD = 1.15$), or if they had a major decision to make ($M = 4.09$, $SD = 1.08$), the overall relationship with the mother ($M = 8.33$, $SD = 1.81$), how much the child admired the mother ($M = 8.68$, $SD = 1.71$), and how often the mother praised the child ($M = 3.87$, $SD = 1.08$). No items that specifically measured the mother's responsive parenting were available.

Controls—Controls include the child's gender (1 = *female*, 57%; 0 = *male*) and age (in years; $M = 13.97$, $SD = 2.20$), the child's household income (in dollars divided by 1,000; $M = 43.07$, $SD = 38.79$, $Mdn = 35.40$), and how much time in months had passed since the child lived in the same household with the father and mother ($M = 124.13$, $SD = 48.75$). Single-item dichotomies measure whether (1 = *yes*, 0 = *no*) the mother and father had been married to each other at one time (yes = 84%), whether the mother was currently married (yes = 42%), and whether each parent had at least some college education (yes = 47% of mothers, 28% of fathers). The number of Hispanics, Asians, Native Americans, and other groups was too small to analyze separately, so mother's race was dichotomized (1 = *non-White*, 33%; 0 = *White*). Finally, all models include the lambda for attrition as a control. This attrition variable was not significant at $p < .05$ in any of our models.

Aside from a handful of cases on various items, missing data were not a major problem in this study for most measures used. Ninety-nine mothers (22%) did not answer any questions about the nonresident father, however, leaving a large number of missing cases for the father's education, whether the mother and father had been married, how much time had passed since the father lived in the same household as the child and the mother, and payment of child support. To deal with this, and because including these mothers in our sample could bias our results, we created a variable reflecting membership in this group of 99 mothers (1 = *yes*, 0 = *no*) and included it as a control in our models. It was never significant, however. Moreover, models were estimated using the missing data facility in AMOS, which uses full-information maximum likelihood estimation (Arbuckle & Wothke, 1999).

Results

Measurement Model

For our main analysis, we relied on SEM using the AMOS software (Arbuckle & Wothke, 1999). The measurement model (see Table 1) shows the eight latent constructs included in our analyses, as well as the observed indicators for each construct and their factor loadings. The model fit the data reasonably well, and all paths between the latent and observed variables were significant ($p < .001$).

Correlations between each of the latent variables are shown in Table 2. (Because child grades and father's payment of any monetary support were key variables, we included them in the correlation matrix as well.) As the table suggests, all four dimensions of nonresident father involvement (contact, relationship quality, responsive fathering, and payment of support) were positively related to each other ($p < .001$). Similarly, all but one of the correlations between the five child outcomes were significant, and all were in the expected direction.

With respect to the link between nonresident father involvement and child outcomes, fatherchild relationship quality and responsive fathering were both correlated with better grades ($p < .01$), and responsive fathering was also associated with fewer internalizing problems ($p < .05$). Payment of support was correlated with less acting out in school ($p < .05$). A few marginal associations ($p < .10$) emerged as well: Father-child relationship quality was associated with fewer internalizing problems, responsive fathering and contact were correlated with fewer externalizing problems, and payment of support was related to higher self-efficacy. Although these findings are consistent with our hypotheses regarding the positive benefits of nonresident father involvement, the magnitude of these correlations is modest.

The quality of the mother-child relationship was related to the quality of the father-child relationship ($p < .001$), and was marginally associated with responsive fathering ($p < .10$), but was not significantly related to the other two measures of nonresident father involvement. With the exception of self-efficacy, mother-child relationship quality was correlated with all measures of child well-being, including better grades, fewer internalizing and externalizing problems, and less acting out at school (all $p < .001$). As hypothesized, the magnitude and significance of the effects for the mother-child relationship are larger than those for the father-child relationship.

Despite the high correlations between some of the nonresident father involvement variables (e.g., relationship quality and responsive fathering) and some of the outcome variables (e.g., externalizing problems and acting out at school), treating these constructs as distinct and separate resulted in higher factor loadings and a better model fit than modeling them together as one construct.

Full Structural Model

Following our hypotheses, we modeled fatherchild relationship quality and responsive fathering as direct predictors of child outcomes, with father-child contact as an indirect predictor of child outcomes through relationship quality and responsive fathering. (Preliminary analyses not shown revealed that once controls were added to the model, the modest correlation between contact and fewer externalizing behaviors was no longer significant.) Because father-child relationship quality and responsive fathering are so highly correlated ($r = .86$, $p < .001$), we did not include them in the same analysis, but rather treated each as a predictor of child outcomes in separate structural models with all control variables included (see Figures 1, 2, 3a, and 3b). (Although preliminary analyses not shown revealed that payment of support was not associated with child outcomes once controls were added, we included it as a control in our full structural models because of its correlation with the other dimensions of father involvement.)

All figures indicate that our structural models fit the data reasonably well. In the first set of analyses (see Figures 1 and 3a), we estimated the effect of father-child relationship quality and responsive fathering on outcomes along with all controls except mother-child relationship quality. We then added mother-child relationship quality to the models in a second set of analyses (see Figures 2 and 3b) to assess the importance of nonresident father involvement once the role of the mother was considered. This step allowed us to determine the extent to which excluding information on the mother-child relationship results in overestimating the influence of fathers.

Father-child relationship quality—Figure 1 shows the estimated effect of father-child relationship quality on adolescent outcomes. The results show that a closer father-child relationship is modestly associated with fewer externalizing and internalizing problems, and with better grades ($p < .05$), suggesting the potential benefits nonresident fathers can afford their children.

Figure 2 shows the results of our analyses once the mother-child relationship is included in the model. Although father-child relationship quality is still modestly associated with fewer externalizing and internalizing problems ($p < .10$), the coefficients are reduced, and the association with better grades is no longer significant. These results suggest that studies that do not account for the mother-child relationship overestimate the influence of the nonresident father–child relationship on child outcomes. As the figure also indicates, the mother-child relationship is particularly important for adolescent outcomes. A closer mother-child bond is associated with better outcomes for children on all measures of well-being except self-efficacy.

Responsive fathering—With respect to the estimated effect of responsive fathering, Figure 3a shows a nearly identical pattern to that found for father-child relationship quality. Responsive fathering is associated with fewer externalizing and internalizing problems ($p < .05$) and with higher grades ($p < .10$).

The results in Figure 3b show that once mother-child relationship quality is added to the model, responsive fathering is still modestly associated with fewer internalizing problems ($p < .05$) and fewer externalizing problems ($p < .10$), but the coefficients are reduced, and the link with better grades is no longer significant. Again, mother-child relationship quality is consistently and more strongly related to adolescent well-being. Although the links between both relationship quality and responsive fathering and externalizing and internalizing problems are modest, they are particularly noteworthy, given that these two outcomes are based on mother reports and thereby avoid the problem of common method variance.

Father-child contact—Although father-child contact has no direct association with any of the child outcomes in our models, it is significantly related to higher quality father-child relationships and more responsive fathering ($p < .001$, see Figures 1, 2, 3a, and 3b), suggesting that contact may be an important indirect factor in promoting child well-being. To test this, we performed a bootstrapping procedure in AMOS (Arbuckle & Wothke, 1999) to obtain standard errors for the indirect effects of contact on externalizing and internalizing problems through father-child relationship quality and responsive fathering. The results (not shown) indicated that contact has a significant, albeit indirect, association with fewer internalizing and externalizing problems through responsive fathering ($p < .05$) and with fewer internalizing problems through father-child relationship quality ($p < .10$). (The indirect effect of contact on externalizing behaviors through relationship quality approached but did not reach significance.)

Group differences—To assess whether the estimated effect of father-child relationship quality and responsive fathering on child outcomes differed by groups, we tested our models for interactions (results not shown) by running multigroup models (Arbuckle & Wothke, 1999) separately for boys ($n = 204$) and girls ($n = 244$), Blacks ($n = 121$) and Whites ($n = 292$), those born inside of marriage ($n = 259$), and those either born outside of marriage or with no information on this item ($n = 194$). (Because the number of children born outside marriage was small [$n = 55$], we were unable to isolate this group for comparison with those born inside marriage. We therefore combined these 55 cases with the 139 cases that had missing data on this item.) We also compared those who were 10 – 15 ($n = 319$) and 16 – 18 ($n = 134$) years of age, those with ($n = 175$) and without ($n = 276$) a stepfather, those whose mothers had ($n = 200$) and did not have ($n = 253$) some college education, those whose fathers had ($n = 93$) and did not have ($n = 258$) some college education, and those above the median income ($n = 206$) and those at or below the median income ($n = 206$).

We tested for interactions by running the models twice: once with the paths free to vary, and again with each path constrained (one at a time) to be the same between groups. A significant chi-square change served to indicate whether group differences existed. Our models were

consistent across all groups with two exceptions: Father-child relationship quality was associated with better grades for boys ($B = .27$, $p < .01$), but not for girls ($B = –.03$), and was also associated with less acting out at school for boys ($B = −.20$, $p < .10$), but more acting out for girls ($B = .17$, $p < .10$). The advantage of non-resident father involvement for boys is consistent with some previous work (Amato & Rezac, 1994), but an explanation for the link between daughters' ties to their nonresident father and more acting out is unclear. We also note that the link for daughters is only marginally significant. It is possible that nonresident fathers increase their efforts toward a close relationship when their daughters exhibit problem behaviors, but we cannot test this possibility with these data. Despite these two exceptions, however, our results were the same across all other group comparisons on all other outcomes, indicating the consistency of our findings across groups of adolescents.

Ties to Both Parents

To test for interactive processes between the non-resident father–child and mother-child relationship, we compared the mean level of child outcomes for four groups: those with strong ties to both parents, those with strong ties to the mother only, those with strong ties to the nonresident father only, and those with weak ties to both parents. To create these groups, we used the factor loadings from the latent variables representing father-child and mother-child relationship quality to construct a weighted scale for each. We then split each scale at the median, which yielded the four possible parent-child relationship patterns described above. This approach is similar to the methods used by Buchanan et al. (1996) in their study of California adolescents. Because we expected those who had weak ties to both parents to be worse off than all other offspring, we present results from the model that initially used this group as the omitted category (see Figure 4). We also tested the model, however, with each other group as the omitted category in order to test for the significance of the differences between all the groups (results not shown but discussed below). The mean level of all outcomes for those with weaker ties to both parents was therefore set at 0 in Figure 4, and all other group means were relative to that zero point. The mean levels of all outcomes were also adjusted to reflect the inclusion of our control variables.

As the figure indicates, adolescents who do not have strong ties to either parent have significantly worse outcomes than all other groups. Compared to adolescents with weak ties to both parents, adolescents who report close ties to both parents report significantly higher grades, fewer externalizing and internalizing problems, and less acting out at school (all at $p < .01$). Those with close ties only to the mother also report less acting out at school ($p < .001$), fewer externalizing problems ($p < .01$), and fewer internalizing problems ($p < .05$) than adolescents with weak ties to both parents. Moreover, analyses directly comparing those with close ties to both parents and those with close ties only to the mother showed no significant differences between them in terms of any adolescent outcome.

Having strong ties to the nonresident father alone is associated with fewer internalizing problems and less acting out at school ($p < .10$) compared to having weak ties to both parents. Comparing adolescents with close ties only to the nonresident father with adolescents who were close to both parents revealed that those who were close to both parents earned higher grades ($p < .01$) and had fewer externalizing problems ($p < .10$). Comparing adolescents with close ties only to their mother with adolescents who were only close to their nonresident father, however, indicated that the only significant difference between them is that those with strong ties to their mother were less likely to act out at school ($p < .10$).

Overall, what most clearly emerges from these results is that adolescents are worst off when they have poor relationships with both their mothers and nonresident fathers. Having strong ties to one parent is nearly as beneficial as having strong ties to both parents, with only a limited advantage if that stronger tie is to the mother rather than the nonresident father. This is further

evidence that strong ties to nonresident fathers can benefit child well-being. Our results regarding the negative effects of having poor relationships with both parents are consistent with the findings of Buchanan et al. (1996). They also reported, however, that adolescents who had strong ties only to the non-resident father were not doing any better than those who had poor relationships with both parents. In contrast, we find that adolescents who had strong ties only to their nonresident fathers are somewhat advantaged (albeit modestly) over adolescents who have poor ties to both parents in terms of exhibiting fewer internalizing problems and less acting out at school, suggesting that having close ties only to the nonresident father may be beneficial over poor ties to both parents at least for some outcomes.

Conclusions

With half of all U.S. children growing up in households without their fathers, increased attention is needed to understand the role of non-resident fathers in their children's lives and the ways in which this involvement can promote child well-being. As Nord and Zill (1996) warn, current policy concerning nonresident fathers and their children is largely based on studies with small, unrepresentative samples, or on the experiences of families in particular states. These studies may not reflect what is currently happening in many families (Cabrera & Peters, 2000; Furstenberg, 1995).

Our results suggest that strong ties to nonresident fathers can benefit adolescent well-being. Even after controlling for family background characteristics that are associated with patterns of fathering, and accounting for the mother-child relationship, we found that nonresident fathers still made a unique contribution to their children's well-being. In particular, high-quality relationships, in which nonresident fathers exhibited warm and supportive behaviors, were associated with fewer internalizing and externalizing problems among adolescents. Father's responsive parenting was also associated with fewer internalizing and externalizing behaviors. Not surprisingly, high-quality relationships and responsive parenting behaviors are highly correlated, suggesting that warm fathers also tend to be highly responsive to their children.

Furthermore, the benefits of high-quality father-child ties and father's responsive parenting appear to be similarly important for different groups of children. The only exception we found was that boys, but not girls, benefited from having high-quality father-child relationships (but not from responsive fathering) in terms of better grades and less acting out at school. Child's gender made no difference for the benefits of father involvement on internalizing and externalizing behaviors. Moreover, we found no evidence that disadvantaged adolescents were more or less affected by the involvement of their nonresident fathers than their more advantaged counterparts. These findings are consistent with prior research on contact and child support (e.g., King, 1994b) that also fail to find moderating effects on child outcomes, with occasional exceptions (Amato & Rezac, 1994) that suggest a stronger influence of nonresident father involvement for boys than for girls.

Further evidence that strong ties to nonresident fathers can benefit adolescent well-being comes from our finding that adolescents are worst off when they have poor relationships with both their mothers and nonresident fathers. Even if adolescents have a poor relationship with their mother, having strong ties to the nonresident father alone is associated with fewer internalizing behaviors and less acting out at school compared to having weak ties to both parents.

Our findings are consistent with recent research suggesting that more intensive types of nonresident father involvement beyond mere contact are especially important for children's welfare (Amato & Gilbreth, 1999). Consistent with prior research, we found no direct link between contact and child outcomes. We discovered, however, that contact does have significant indirect effects on child well-being through its strong association with both

relationship quality and responsive fathering. Although hardly a guarantee, more frequent contact appears necessary for nonresident fathers to maintain high-quality relationships with their children and to engage in responsive parenting.

Prior research has shown that child support is linked to some child outcomes, and we suspect that the lack of significant effects of monetary support in our study may result from in part the long time that has elapsed (over 10 years on average) since many of the parents lived together in our sample of families with adolescents. Child support payments may be most beneficial in the immediate aftermath of the separation when mothers and their children often experience the most economic hardship. Nevertheless, the provision of support is positively associated with contact as well as with relationship quality and father's responsive parenting.

The effects of nonresident father involvement on adolescent well-being found in this study are clearly modest. This finding is consistent with the meta-analysis by Amato and Gilbreth (1999) showing that when it comes to nonresident father involvement, although feelings of closeness and indicators of authoritative parenting have the strongest influence on child well-being, the effects are generally modest.

Our results also reveal that the quality of the mother-child relationship has stronger, more consistent effects on adolescent well-being than the nonresident father–child relationship. This finding does not negate the importance of nonresident fathers, but it does highlight the crucial role that the mother-child relationship plays in children's well-being. This is also a consistent finding among the few studies that examine the influence of both the mother-child and nonresident father–child relationship.

Given that mothers are more often the primary parenting figure in children's lives both before and after divorce, it is not surprising that the mother-child relationship is particularly consequential for child well-being. It is possible that the relatively weaker effects of nonresident father involvement could be stronger if a larger number of fathers was highly involved in their children's lives. Because minimally involved fathers make up a significant portion of all nonresident fathers, shifting the level of father involvement upward would likely lead to a corresponding shift in the magnitude of associations between nonresident father involvement and child well-being.

Our study is limited by examining the relationship between nonresident fathers and their adolescent children at a single point in the child's life, offering only a snapshot of the constantly evolving landscape of adolescent-father relationships. Given that many years on average have passed since the parents separated, and that non-resident father involvement tends to decline over time (Seltzer, 2000), the nonresident fathers in our study who were still actively engaged in parenting their adolescents may be a select group of fathers. Future research would benefit from a life course perspective that would focus on fathering over time and across the lives of children. Further, the reciprocal nature of the relationship between adolescent well-being and ties to their nonresident fathers needs to be examined. The models in this study assume that nonresident father–child relationship quality and responsive fathering affect adolescent outcomes, but it is also possible that the adolescent's behavior affects the father-child relationship such that adolescents who exhibit fewer problems may more easily elicit a nonresident father's warmth and engagement. This possibility cannot be ruled out in this study because it relies on cross-sectional data.

In addition, although our study suggests that relationship quality and responsive parenting are particularly salient dimensions of nonresident father involvement in terms of positive outcomes for children, other forms of paternal involvement must also be considered, such as a father's support of the adolescent's growing autonomy, encouragement of the adolescent in the face of challenges, and support of the adolescent's engagement in the world beyond family (NICHD

Early Child Care Research Network, 2004). Other dimensions of authoritative parenting, such as noncoercive discipline, setting limits, and monitoring, may also be important (Amato & Gilbreth, 1999).

Our study makes important contributions toward understanding the ways in which nonresident father involvement can promote child well-being. Using national data, we consider a wider range of fathering behaviors and child outcomes than most prior studies, allowing us to assess what forms of nonresident father involvement are most consequential for different aspects of adolescent well-being. In particular, we provide new evidence on the importance of father-child relationship quality and father's responsive parenting practices. We also examine whether non-resident father involvement is more beneficial for some children than for others. Importantly, we include the role of the mother-child relationship when assessing the importance of nonresident fathers in children's lives. Finally, in contrast to many prior studies that rely on mother reports of father involvement, which likely underestimate his involvement, our study uses adolescent reports of the father-child relationship, providing an important contribution to the literature. Our findings demonstrate that although living apart from children makes it difficult for men to enact the parental role, when nonresident fathers find ways to maintain high-quality relationships with their children and engage in responsive parenting practices, their children appear to benefit.

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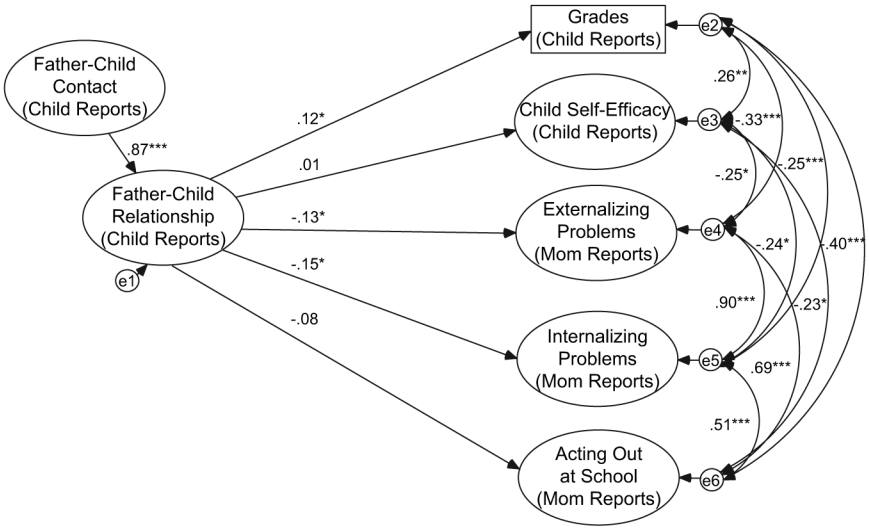

Figure 1. Father-Child Relationship on Child Outcomes

Note: All coefficients are standardized. $\chi^2 = 740.091$, *df* = 439, CFI = .940, RMSEA = .039. This model controls for whether father pays any support; child's household income, race, gender, and age; father's and mother's education; whether mother is married; whether mother and father were married; time since child lived with father and mother together; attrition; and whether mother's reports of father's information is missing.

†$p < .10$. *$p < .05$. **$p < .01$. ***$p < .001$.

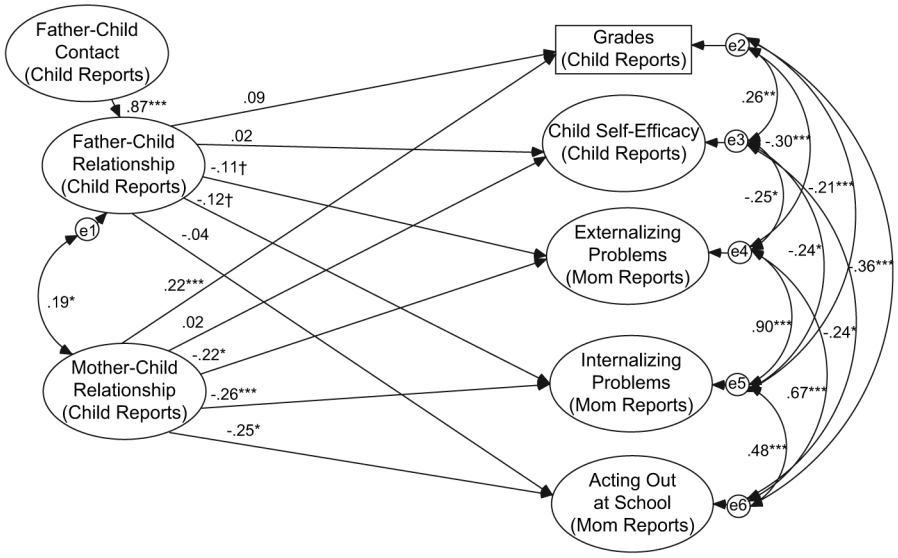

Figure 2. Father-Child and Mother-Child Relationships on Child Outcomes

Note: All coefficients are standardized. $\chi^2 = 976.596$, *df* = 590, CFI = .934, RMSEA = .038. This model controls for whether father pays any support; child's household income, race, gender, and age; father's and mother's education; whether mother is married; whether mother and father were married; time since child lived with father and mother together; attrition; and whether mother's reports of father's information is missing.

†$p < .10$. *$p < .05$. **$p < .01$. ***$p < .001$.

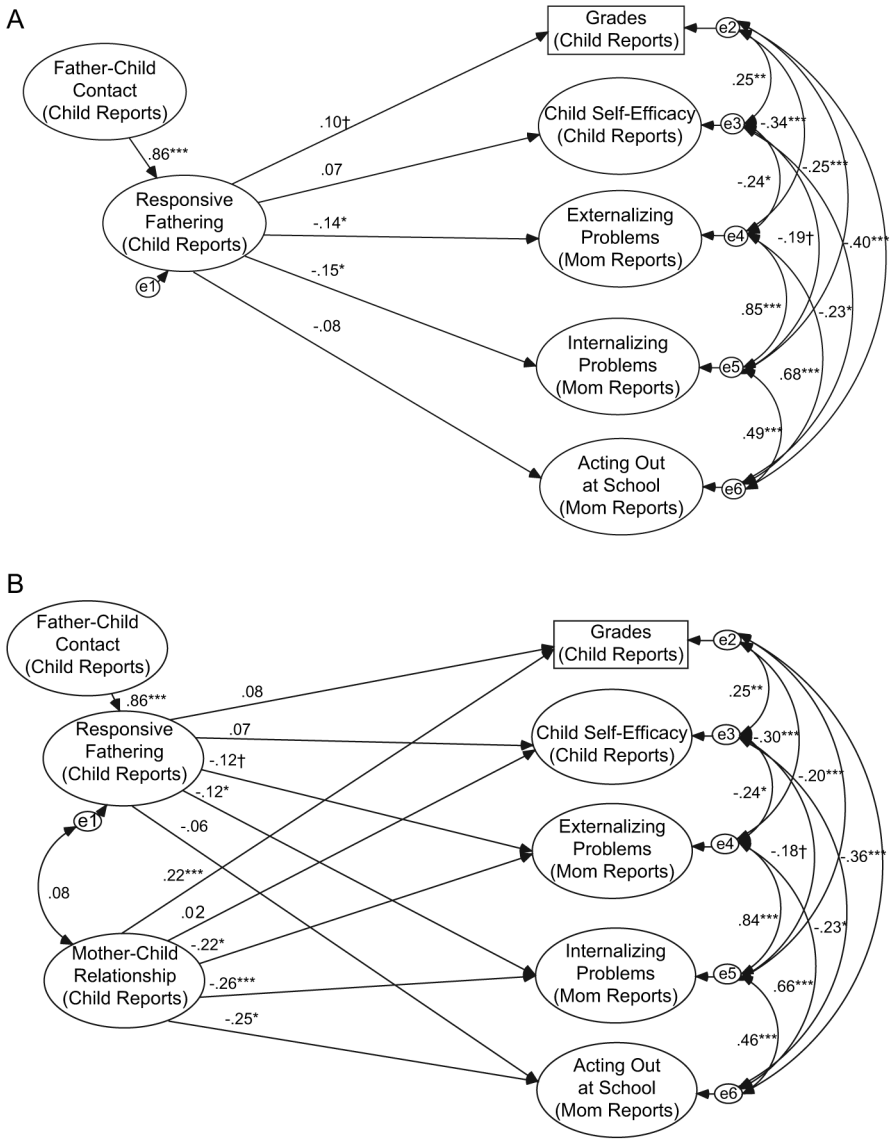

Figure 3a, b. Responsive Fathering on Child Outcomes

Note: All coefficients are standardized. Figure 3A: $\chi^2 = 554.104$, $df = 365$, CFI = .950, RMSEA = .034. Figure 3B: $\chi^2 = 777.998$, $df = 515$, CFI = .943, RMSEA = .034. This model controls for whether father pays any support; child's household income, race, gender, and age; father's and mother's education; whether mother is married; whether mother and father were married; time since child lived with father and mother together; attrition; and whether mother's reports of father's information is missing.

†$p < .10$. *$p < .05$. **$p < .01$. ***$p < .001$.

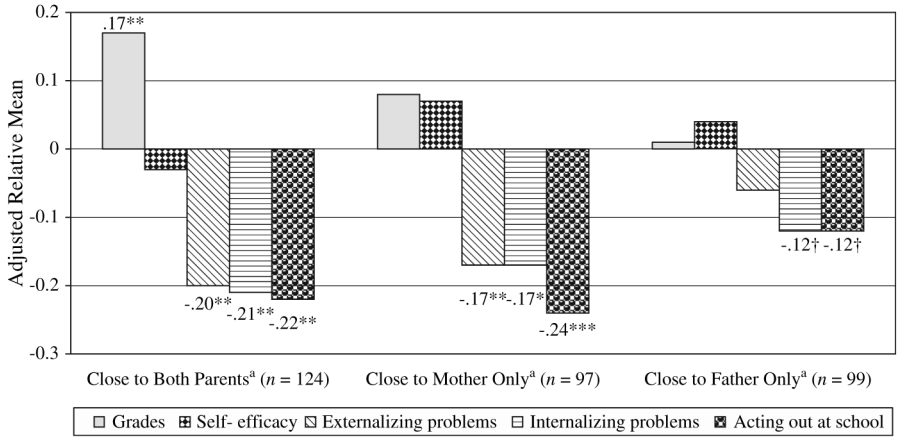

Figure 4. Child Outcomes by Parent-Child Relationship Pattern

Note: All scores are standardized. $\chi^2 = 586.42$, $df = 338$, CFI = .93, RMSEA = .04. This model controls for whether father pays any support; child's household income, race, gender, and age; father's and mother's education; whether mother is married; whether mother and father were married; time since child lived with father and mother together; attrition; and whether mother's reports of father's information is missing. [a]Close to neither parent is the reference group (n = 125).

†$p < .10$. *$p < .05$. **$p < .01$.

Table 1

Measurement Model: Latent Variables and Factor Loadings of Observed Indicators[a] (N = 453)

Latent Variable	Observed Indicator	Factor Loading
Father-child contact (child)	How often child sees father	.82
	How often child talks to father on phone/in letter	.90
Father-child relationship quality (child)	Overall father-child relationship	.84
	How much child admires father	.73
	Child would talk to father if depressed	.88
	Child would talk to father about decisions	.92
	How often father praises child	.69
Responsive fathering (child)	Father explains reasons to child	.72
	Father discusses decisions with child	.86
	Father changes mind for child	.60
Mother-child relationship quality (child)	Overall mother-child relationship	.88
	How much child admires mother	.60
	Child would talk to mother if depressed	.78
	Child would talk to mother about decisions	.71
	How often mother praises child	.32
Self-efficacy (child)	Child feels has control over life	.55
	Child feels can change important things	.46
Acting out at school (mother)	Child has cut class	.47
	Mother had to talk with principal about child	.52
	Child disobeys at school	.84
Externalizing behaviors (mother)	Child bullies others	.57
	Child disobeys at home	.67
	Child has trouble getting along with others	.57
	Child loses temper easily	.70
	Child is impulsive/acts without thinking	.66
	Child is restless/overly active	.50
Internalizing behaviors (mother)	Child feels worthless	.65
	Child has sudden changes in mood	.62
	Child is unhappy or depressed	.62
	Child is fearful/anxious	.46
	Child is nervous/high strung	.68

Note: All factor loadings are significant at $p < .001$. $\chi^2 = 721.756$, $df = 432$, CFI (Comparative Fit Index) = .949, RMSEA (root mean square error of approximation) = .039.

[a] Whether the mother or child is the reporter is in parentheses.

Table 2

Measurement Model: Correlation Matrix for All Latent Variables, Child's Grades, and Father's Payment of Child Support

	1	2	3	4	5	6	7	8	9	10
1. Father-child contact	—									
2. Father-child relationship quality	.74***	—								
3. Responsive fathering	.80***	.86***	—							
4. Father pays support	.37***	.26***	.28***	—						
5. Mother-child relationship quality	.08	.20***	.10†	−.05	—					
6. Grades	.07	.15**	.14**	.06	.21***	—				
7. Self-efficacy	.06	−.09	.04	.15†	−.12	.22**	—			
8. Acting out at school	−.07	−.07	−.10	−.14*	−.22***	−.47***	−.24**	—		
9. Externalizing	−.10†	−.08	−.12†	.02	−.21***	−.32***	−.23**	.64***	—	
10. Internalizing	−.05	−.10†	−.12*	.08	−.26***	−.24***	−.12	.47***	.87***	—

Note: χ^2 = 721.756, *df* = 432, CFI = .949, RMSEA = .039. *N* = 453.

† *p* < .10.

* *p* < .05.

** *p* < .01.

*** *p* < .001.