

FAMILY STRUCTURE, FATHER-CHILD CLOSENESS AND
SOCIAL-BEHAVIORAL OUTCOMES FOR CHILDREN*

Marcia J. Carlson

Princeton University

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Abstract

Since father absence is associated with adverse outcomes for children, one would expect greater father involvement to obviate the negative effects of experiencing a single-parent family. Yet, many studies do *not* demonstrate that greater father-child interaction has beneficial effects for children and adolescents. This is because the quality of father involvement may be more important for children's wellbeing than the quantity. Using data from the 1997 Panel Study of Income Dynamics Child Development Supplement, this paper examines how father-child closeness may mediate the effects of family structure on various social-behavioral outcomes for children, as well as fathering behaviors that are linked to closeness. I find that father-child closeness partially "explains" family structure effects, and fathers' warmth and affection toward their children is positively associated with closeness.

INTRODUCTION

The association between father absence and children's outcomes is well-documented; children who spend time in a single-parent family have greater negative outcomes, on average, compared to other children, regardless of race, education or parental remarriage (McLanahan and Sandefur 1994). This finding applies to various outcome measures, but family structure has particularly notable effects on behavioral outcomes (Dawson 1991; McLanahan 1997). Living in a single-parent family has been linked to higher levels of both externalizing and internalizing behavioral problems (see, for example, Dornbusch et al. 1985; Stern et al. 1984; Castro et al. 1987; Covey and Tam 1990; Hetherington and Clingempeel 1992).

Despite numerous studies of family structure, the causal pathways by which family structure affects child and adolescent outcomes have not been fully explicated (Demo and Acock 1996; Wu, Cherlin and Bumpass 1997). In particular, the quality of a child's relationship with his or her father may be associated with both family structure and child outcomes and partially "explain" why differences in wellbeing are observed by family type. Most previous studies have not directly examined the quality of fathers' involvement or affective ties with their children. Instead, researchers have implicitly assumed that a father's absence from the child's household represents his absence from the child's life altogether.

In this paper, I use data from the Panel Study of Income Dynamics, 1997 Child Development Supplement to examine how father-child closeness may mediate the effects of family structure on various social-behavioral outcomes for children. Then, I evaluate how specific aspects of fathers' involvement in their children's lives may be linked to perceived father-child closeness for children in intact families as compared to nonintact families.¹

PREVIOUS RESEARCH AND HYPOTHESIS

Family structure and children's behavior. Family structure has been associated with both externalizing (aggressive, anti-social or noncompliant) and internalizing (depressive, anxious or emotionally overcontrolled) behavioral problems among children. These types of problem behavior have different developmental pathways (Verhulst et al. 1993), and children with high levels of either type are more likely than other children to have problems later in life (Harrington et al. 1990; Loeber 1988; Chase-Lansdale et al. 1995). Compared to children living with two biological parents, children in other family types are more likely to have been suspended or expelled from school (Dawson 1991), to have demonstrated various other delinquent behaviors (Dornbusch et al. 1985; Steinberg 1987; Teachman et al. 1998), or to have higher scores on indices of overall externalizing behavior problems (Hanson, McLanahan and Thomson 1997; Lindner et al. 1992). Children living in single-mother or mother-stepfather families display higher scores on measures of overall internalizing behavior problems, as well as higher levels of depression and anxiety, compared to children in intact families (Hanson et al. 1997; Lindner et al. 1992).

Family structure and father involvement. Family structure has been clearly associated with father involvement. Fathers who do not live with their children see their children less often, which decreases the likelihood that father and child will develop a close relationship (Furstenberg and Harris 1992; Seltzer 1991). Particularly following divorce, fathers are likely to become less involved with their children over time, especially if they subsequently have biological, co-resident children with a new partner (Manning and Smock 2000). Although lack of contact between fathers and children does not necessarily indicate lack of ties, as Furstenberg and Harris (1992) write, "Relationships with outside fathers are neither prevalent nor predictable."

Father involvement and children's outcomes. Since father absence is associated with adverse outcomes for children, one would expect that greater father involvement would obviate the negative effects of experiencing a single-parent family. Yet, many studies of the frequency of contact between nonresidential fathers and their children do *not* demonstrate that greater father-child interaction has beneficial effects for children and adolescents (Crockett et al. 1993; Hawkins and Eggebeen 1991; Kandel 1990; Furstenberg et al. 1987; Simons et al. 1994; King 1994a and 1994b). Further, the lack of effects of father-child contact is not moderated by race, gender, mother's education, or whether the child was born within or outside of marriage (King 1994b). Several researchers who have found no significant effects of greater father involvement have suggested that the *quality* of the father-child relationship may be more important than the quantity (Amato 1998; King 1994b; Crockett et al. 1993; Simons et al. 1994). This is consistent with psychological research that has documented clear, beneficial effects of fathering for children (e.g. Lamb 1997).

Recent sociological research has begun to find that the quality of father involvement is linked to decreases in externalizing and internalizing behavior problems among children including delinquency, substance use, anxiety and depression (Amato and Rivera 1999; Harris, Furstenberg and Marmer 1998; Harris and Marmer 1996; Zimmerman et al. 1995). However, the observed effects are not consistent across studies. Greater evidence that high-quality father involvement benefits children has been noted within intact families; it is less apparent that involvement by nonresidential fathers has positive effects (Amato 1998).

Hypothesis

I expect that the quality of the father-child relationship (as reported by the primary caregiver) has a positive effect on children's outcomes and that the effect of family structure can be partially "explained" by father-child closeness. While fathers who reside with their children are more likely to invest time in and provide emotional support to their children, a father's living outside the home does not necessarily indicate a lack of involvement or closeness (Zimmerman et al. 1995). I expect that children who have a close and supportive relationship with their fathers are less likely to exhibit behavioral problems and more likely to demonstrate positive behaviors and have higher overall wellbeing.

DATA, VARIABLES AND METHODS

Data from the Panel Study of Income Dynamics (PSID), 1997 Child Development Supplement (CDS) are utilized. The Child Development Supplement was added to the PSID in 1997 in order to provide direct assessments of children's development and experiences and detailed information on parental involvement. Information was collected for up to two children ages 0-12 of PSID respondents. Data were gathered from "primary caregivers" (usually mothers), "other caregivers" (usually fathers) and absent fathers, as well as teachers and children themselves (ages 3 and older). For the three categories of parents (primary caregivers, other caregivers and absent fathers), two separate booklets were administered—a child questionnaire with questions about children's wellbeing and parenting, and a household questionnaire containing questions about household tasks, attitudes, psychological wellbeing and monitoring of children.

Altogether, the 1997 PSID-CDS includes 3,563 children (from 2,380 households). Each child in the sample has a completed child questionnaire by the primary caregiver, as this was a

criterion for inclusion in the CDS sample. About 2,700 children were identified as having an other caregiver in the home, but for only half of these children was the other caregiver actually interviewed. Of the total number of children, 1,294 (36 percent) were identified as having an absent (nonresidential) father (Hofferth et al. 1998).² However, response rates among nonresidential fathers were very low, with 22 percent of all absent fathers having completed a child and/or household questionnaire.³

Because the multi-dimensional measures of father involvement—a major strength of the Child Development Supplement—are self-reported, the low response rate for absent fathers implies that detailed information on father involvement is disproportionately available for children living with both of their biological parents (i.e. where the father was an other caregiver). Also, the absent fathers who *did* participate in the study represent a highly selective group who are likely more attached to their children than absent fathers overall. In order to deal with these issues, the analysis was divided into two parts. First, for the analysis of how father involvement may mediate family structure effects, I chose to utilize the one measure of father involvement that is available for all children—the level of closeness in the father-child relationship, as reported by the primary caregiver.⁴ This measure provides an indication of the perceived quality of the father-child relationship for children across *all* family structures. Second, I examine how various dimensions of fathers' behavior toward and interaction with their children may be linked to father-child closeness *within* intact and nonintact family types, recognizing that the fathers in the nonintact sub-sample are not representative of nonresidential fathers as a whole.

Dependent Variables

Five dependent variables are used to measure child wellbeing—four measures for children ages 3 to 13 and one additional measure for school-aged children (ages 5 and older). Each of the dependent variables is based on reports from the primary caregiver. The first two measures are from the Behavior Problems Index (BPI). Developed by Nicholas Zill and James Peterson, the BPI includes 30 measures of child adjustment and behavior problems that children may have exhibited in the past three months, as reported by the child’s caregiver. In constructing the BPI, many items were utilized from the Achenbach Behavior Problems Checklist (Achenbach and Edlebrock 1981) and other well-known child behavior indices. A common response scale is used for each item (1=not true, 2=sometimes true, 3=often true). Scores for each of the items are summed, and higher scores indicate a higher level of behavioral problems. In this paper, two different subscales of the BPI (constructed by the PSID staff using raw scores) are used—one for externalizing behavior and one for internalizing behavior. For the externalizing subscale, 16 items are combined ($\alpha=.86$); for the internalizing subscale, 13 items are combined ($\alpha=.81$) (Hofferth et al. 1998).

The third outcome variable measures children’s positive behavior, as reported by the primary caregiver. The Positive Behavior Scale was developed by Denise Polit for use in the New Chance Evaluation (Polit 1998). Contrary to many behavioral measures which focus solely on negative or delinquent behaviors, this instrument lists a series of positive behaviors that children may have exhibited such as social competence, self-control, obedience/compliance and persistence. While the original scale consisted of 25 items, an abbreviated scale of 10 items was used in the CDS. For each item, caregivers rate their child on a scale of 1 (“not at all like child”) to 5 (“totally like child”), and items are summed into a single measure ($\alpha=.79$).

The fourth dependent variable reflects children's overall wellbeing (again, as reported by primary caregivers). This measure includes eight items that reflect "how things are going in general" in the child's life with respect to the following: health, friendships, relationship with respondent, feelings about self, prospects for the future, relationship with siblings, relationship with teacher or caregiver, and relationship with other parent. Caregivers can respond on a scale ranging from 1 ("poor") to 4 ("excellent"), and items are summed ($\alpha=.81$).

For children in school (ages 5 and higher), an additional more "objective" measure of children's school behavior is also used—whether the child has ever been suspended or expelled from school (as reported by the primary caregiver).

Independent Variables

A major independent variable of interest in this paper is family structure. Family structure is determined from the primary caregivers' report about which of the following persons are living with the child at the time of interview: a) biological or adoptive mother; b) biological or adoptive father; c) stepmother; d) stepfather; or e) other father-figure. Five categories were developed as follows based on the individual(s) who are co-resident with the child: (1) lives with both biological parents; (2) lives with a biological mother and a stepfather or other (nonbiological) father-figure;⁵ (3) lives with a biological father only (and no biological mother or stepmother); (4) lives with a biological mother only (and no stepfather or other father-figure) and (5) lives in another family type (primarily in a household with neither biological parent). While all five categories are shown in the descriptive statistics, the biological-father-only group contains an insufficient number of cases to be included separately in multivariate analyses; therefore, cases in this category are put into the "other" category for the regression models.

A second key independent variable is the quality of father involvement, measured by the primary caregiver's report of how close the child feels to his or her biological father.⁶ This is reflected in a single question for which the response choices are 1 (not at all close), 2 (fairly close), 3 (quite close) and 4 (extremely close).⁷

Background characteristics. Various other independent variables that previous research has found to be important are also included in the analyses. Children's demographic characteristics that have been consistently utilized as control variables in previous studies of family structure and child outcomes include race (white, black, Hispanic and other race), age (ages 3-5, 6-9 and 10-13), and gender (e.g. Aquilino 1996; Hanson et al. 1997). Being of low birth weight (less than 5.5 pounds) has been adversely associated with child development (Korenman et al. 1995).

For mothers, age is inversely associated with social and psychological resources requisite for positive parenting (Haurin 1992). Greater mastery (internal locus of control) is a psychological resource that protects individuals against the effects of negative life events and social strains (Pearlin et al. 1981); mastery is measured using the Pearlin mastery score, derived from responses to seven items, with higher scores indicating a higher level of mastery (Pearlin and Schooler 1978). Mothers' education may affect child outcomes because better-informed mothers are more likely to provide a wide variety of stimulation and opportunities for their children (Haurin 1992). Following Korenman et al. (1995), mothers' education is specified as three dummy variables for less than 12 years, 12 years, and more than 12 years of education (the latter is the omitted category in regression models).⁸ Mothers who are employed may have less time available to spend with their children and less energy to invest in parenting (Sampson and Laub 1993).

Number of other children is included because the presence of additional children dilutes the adult attention that children may receive (Coleman 1988, cited in Cooksey 1997). Household economic status is operationalized as the average family income-to-needs ratio (using 1996 income and poverty thresholds). Income-to-needs ratio is a better measure of a family's economic status (than average income) because it adjusts for differences in family size and thus takes into account economies of scale (Hanson et al. 1997). Dummy variables are created from the average income-to-needs ratios as follows: less than 1.0 is classified as poor, from 1.0 to 1.85 is classified as near-poor, and higher than 1.85 is categorized as not poor; this approach is consistent with that used by Korenman et al. (1995) in their analysis of long-term poverty and child development.

SAMPLE DESCRIPTIVES

Descriptive statistics for the sample are shown in Table 1. When weighted by the child sampling weight, approximately two-thirds of children lived with both of their biological parents in 1997, eight percent lived with their biological mother and a nonbiological father (step father or other father-figure), two percent lived only with their biological father, 21 percent lived only with their biological mother, and three percent lived in another family situation. Sixty-three percent of the sample is white, 17 percent black, 13 percent Hispanic and 8 percent of another race/ethnicity. About half of children in the sample are female, the mean age is 7.7 years, and seven percent were of low birth weight. For mothers in the sample, the mean age at birth of the child is 28 years, the mean Pearlin mastery score is 3.14, and the mean education level is 12.8 years of schooling (with four-fifths having completed at least 12 years); sixty-two percent of mothers were working at the time of the survey. Fifteen percent of children lived with no other

children in the household, 72 percent with one or two, and 14 percent lived with three or more other children. With respect to economic status, 19 percent of children lived in poor families, 20 percent were near poor, and 61 percent were classified as not poor.

(Table 1 about here)

Table 2 shows overall means, as well as means by family type, for each of the outcome measures and for father-child closeness, as reported by the primary caregiver. Significant differences are noted (with asterisks) for each of the nonintact categories as compared to the intact category—children who live with both of their biological parents (column 2). The table shows that externalizing behavior is significantly higher—and overall wellbeing is significantly lower—in all nonintact groups compared to children in intact families. Internalizing behavior is higher for children living with biological fathers alone, with biological mothers alone or in “other” family types, but is not different for children living with biological mothers and stepfathers, as compared to children living with both biological parents. Positive behavior is lower for children living with only one parent (either biological mother or father) but is not lower for children living in stepfamilies or in “other” families. Finally, the proportion of children who have ever been suspended or expelled is higher for children living in mother-only or “other” families but is not higher for the other two nonintact groups.

(Table 2 about here)

With respect to father-child closeness, co-residence appears to be strongly associated with greater levels of closeness. Primary caregivers report that compared to children living with both biological parents, father-child closeness is significantly lower for all three categories of children who do not live with their biological fathers—children living in biological mother-stepfather families, mother-only families and “other” families. Closeness to father is not

significantly lower for children who are living with only their biological father, as compared to children living with both biological parents.

FAMILY STRUCTURE, FATHER-CHILD CLOSENESS AND BEHAVIORAL OUTCOMES

Using the full sample of children ages 3 to 13 ($n=2,802$), a series of nested regression models are estimated to assess the effects of family structure on each of the behavioral outcome measures while controlling for an increasing number of independent variables. This approach has been used in many previous studies of the effects of family structure on outcomes for children and adolescents—the extent to which family structure effects are sustained or attenuated is evaluated as additional variables are included in successive models (for example, Cooksey 1997; Hoffmann and Johnson 1998; Hill et al. 1996; McLanahan and Sandefur 1994). Father-child closeness is the mediating variable of particular interest in this paper.

Ordinary least squares (OLS) regression is used for the continuous dependent variables (the two BPI subscales, the positive behavior scale and the measure of overall wellbeing), and logistic regression is used for the dichotomous dependent variable—whether ever suspended or expelled from school. Child sampling weights are used, as recommended in the PSID documentation (PSID 1999). Robust standard errors are estimated to adjust for clustering by household (because for 799 households, two children are included in the survey).

In order to evaluate the zero-order correlations of family structure with each outcome measure, the first model includes only the family structure variables; in all models, living with both biological parents is the omitted category. Because there were an insufficient number of cases in the biological-father-only category, these cases were put into the “other” category. Thus, three categories are compared to the intact category—biological mother with step/other father, biological mother only, and “other” (various situations where the biological mother is not

present). Also, in model 1, variables are included to control for who responded to the survey as the primary caregiver, whether the biological mother (omitted category), biological father, or an individual other than one of the biological parents (most often the case in “other” families).

In the second model, background characteristics for the child and mother that are considered to be exogenous to family structure are added. These are: child’s race, gender, age, whether of low birth weight, and mother’s age at birth and educational attainment. By including these variables, possible spurious effects attributed to family structure in the first model are reduced (effects of unobserved variables remain). In model 3, three characteristics that are likely to be endogenous to family structure are included—number of other children in the household, mother’s employment status and family economic status. In model 4, only one additional variable is added—closeness to the biological father, as reported by the primary caregiver. This model facilitates determination of the extent to which the effects of living in a nonintact family are attenuated by the quality of the father-child relationship.⁹

Table 3 presents results for the regression models predicting the externalizing BPI score. Model 1 shows that children living with a biological mother and stepfather, or with a biological mother alone have, higher externalizing BPI scores relative to children who live with both of their biological parents. When exogenous background variables are added in model 2, these family structure effects decline in magnitude but remain significant at the $p < .01$ level. Model 2 indicates that the effects of family structure on externalizing behavior are not primarily due to these other background factors, but have some direct or indirect link with externalizing behavior. (Again, it is important to note there may be important characteristics that are unobserved.) When mother’s employment status, number of other children, and family economic status are added in model 3, only slight declines in the two significant family structure coefficients are observed.

(Table 3 about here)

Results for model 4 show that the addition of father-child closeness notably decreases the magnitude of the family structure effects; this indicates that the quality of the father-child relationship mediates the effects of living in nonintact family types on externalizing behavior. Both of the family structure coefficients that were significant in model 3 decline by more than 60 percent and are no longer statistically significant. Father-child closeness has a small but highly significant direct effect on externalizing behavior; for each one-unit increase in closeness, the average externalizing BPI score declines by approximately 0.7 points (about 12 percent of a standard deviation on the sample mean).

Results for the internalizing BPI subscale are shown in table 4. Family structure is not as strongly associated with this outcome as with the externalizing BPI. Model 2 shows that children in biological-mother-only families have higher internalizing BPI scores. In model 3, when mother's employment status, number of other children in the household, and family economic status are entered, the biological-mother-only coefficient increases slightly. When father-child closeness is added in model 4, the size of the effect of living with a biological mother alone declines and becomes marginally significant. Father-child closeness decreases internalizing behavior among children, with a one-unit increase in closeness reducing the internalizing BPI by 0.6 points—a small but significant effect.

(Table 4 about here)

Regression estimates for the positive behavior scale are shown in table 5. Results for model 1 indicate that family structure is correlated with positive behavior; a significant association is observed for mother-only families and a marginally-significant association for the “other” family type. Adding the background variables in model 2 actually *increases* the

magnitude and significance of the mother-only effect slightly; this is due to the addition of mother's race and mother's education which are both correlated with single motherhood. In model 3, little change in effects is observed when family economic status, mother's employment and number of other children are added. Adding father closeness in the fourth model yields a large decline in magnitude for the mother-only effect—the coefficient size declines by two-thirds. This again indicates that father closeness serves as an important mediator between family structure and positive behavior for children living in a mother-only family. Father-child closeness also has a small but significant effect on positive behavior—for each unit increase in father closeness, the average positive behavior score increases by 0.08, about one-seventh of a standard deviation.

(Table 5 about here)

Results for children's overall wellbeing are shown in Table 6. Model 1 demonstrates that family structure is significantly linked to all three of the nonintact family types, and model 2 indicates that these effects are largely not spurious. Compared to children living with both biological parents, those living with a mother and a stepfather, or with a single mother alone, have significantly lower overall wellbeing, as reported by their primary caregiver. In model 3, these coefficients decline in magnitude slightly, primarily due to the inclusion of economic status. Adding father closeness in model 4 results in sizeable reductions in the family structure coefficients, and none of the three remains statistically significant. The effect of father-child closeness on overall wellbeing is highly significant; each one-unit increase reduces overall wellbeing by 0.14 points—about one-third of a mean standard deviation.

(Table 6 about here)

Logistic regression results for whether the child has ever been suspended or expelled from school (for children ages 5 and older) are shown in Table 7. Log odds ratios are presented for each model instead of coefficients for ease of interpretation. Model 1 indicates that family structure is strongly associated with the likelihood of suspension or expulsion for children living with only their biological mother; the effect is marginally significant for children in mother-stepfather families. The mother-only effect is not entirely spurious as shown by the results for model 2; children in such families are nearly three times as likely to have been suspended or expelled as children living with both biological parents. Adding economic status, mother's employment status, and number of other children in the household in model 3 yields only a modest decline in the magnitude of the effect of living in a mother-only family. When father-child closeness is added in model 4, moderate declines in magnitude for all family structure coefficients are observed, and the mother-only effect becomes statistically insignificant. Father closeness itself has a marginally-significant effect on the likelihood of suspension/expulsion; for each one-unit increase in closeness, the likelihood of suspension is reduced by about 25 percent.

(Table 7 about here)

FATHER INVOLVEMENT AND FATHER-CHILD CLOSENESS

Having shown that father-child closeness is associated with each of the five social-behavioral outcomes and appears to mediate the effects of family structure on the outcomes, I then examined which aspects of fathers' involvement with their children may be linked to greater relational closeness. In other words, to the extent that closeness inherently reflects the *quality* of the father-child relationship, what types of fathering *behaviors* are positively associated with closeness? In his recent book on fatherhood and child development, Michael Lamb (1997)

writes, "...the closeness of the father-child-relationship—itself a consequence of sufficiently extensive and sensitive interactions—is a crucial determinant of the father's impact on child development and adjustment." This implies both that closeness derives from father-child engagement, and that closeness shapes *how* father involvement will affect children. Therefore, investigation of various dimensions of fathering which may be antecedent to father-child closeness is warranted.

Parenting and Children's Outcomes. The psychological literature has consistently demonstrated that two key dimensions of positive ("authoritative") parenting are important for children's outcomes—support and nurturing (or responsiveness), and control and monitoring (or demandingness) (Baumrind 1968 and 1996; Maccoby and Martin 1983). Because overall gender differences in parental influences are not large (although the nature of interactions may differ), fathers' investments in parenting offer children an important resource that until recently has received slight attention compared to the consequences of mothering for children (Lamb 1987a and 1997).

Parents provide important emotional support to children by demonstrating warmth and affection, encouraging them to talk about their problems and concerns, helping them develop problem-solving skills and self-efficacy, and counteracting adverse peer influences (Wills 1990). When children feel loved and cared for by their parents, their emotional security, sense of worth and self-confidence are increased, and these factors contribute to children's positive development (Amato and Gilbreth 1999; Sandler et al. 1989; Wills 1990). Appropriate parental control includes monitoring children's activities and providing supervision and discipline as needed. Parents promote young children's sense of security by imposing and reinforcing limits in a consistent, contingent manner; as children become older, authoritative parents use direct

communication and clear reasoning to promote children's self-regulation and ability to plan (Baumrind 1996).

To the extent that parental support and control are the two primary dimensions of positive parenting, we would expect that parental investment in these areas would foster the development of healthy parent-child relationships. In other words, with respect to this paper, the quality of the father-child relationship represents an intermediate "outcome" that is endogenous to fathers' parenting investments (and subsequently linked to children's outcomes). In order to examine how fathering behaviors may be associated with the quality of his relationship with his child, I estimated a series of OLS regression models¹⁰ predicting father-child closeness using seven measures of father involvement—that reflect parental support and control—and controlling for a range of background characteristics.¹¹ Scores for each of the items are from fathers' self-reports about their behaviors.

Parental support and nurturing is reflected in three different measures of father involvement.

Parental warmth and affection is represented by a six-item scale developed by Child Trends, Inc. for use in the Job Opportunities and Basic Skills (JOBS) observational study (alpha=.85). Fathers report the frequency in the last month that they have done things such as hugged the child, expressed love, and spent time doing the child's favorite activities. Response choices range from 1 (not in the past month) to 5 (every day).

Household activities done together in the last month reflects a variety of tasks that the parent and child may have shared, such as washing clothes, doing dishes, going to the store, and building or repairing something. Fathers can respond from 1 (not in the past month) to 5 (every day). Factor analysis indicated that all but one item—worked on homework with the child—

could be combined into an index, so responses were summed across the remaining items ($\alpha=.77$). While these type of activities may not immediately appear to directly reflect parental support or nurturing, this measure was highly correlated with the measure of parental warmth.

Discussion about school is the third measure reflecting fathers' supportive behavior toward their children; talking about what children experience in school reflects care and interest in what is important to the child. Three questions are asked about how often since the beginning of the school year the parent discussed with the child school activities or events, things the child studied in class, and the child's experiences in school ($\alpha=.77$). These questions are only asked of parents of children enrolled in school; they were modeled after questions used in the 1988 National Education Longitudinal Survey (NELS). Parents can respond 1 (never), 2 (rarely), 3 (occasionally) or 4 (regularly).

Parental control and monitoring is represented by four different measures.

Whether the father knows the child's close friends by sight and first and last name indicates the extent to which the father monitors the child's social relations. Fathers respond whether they know 1 (none of them), 2 (only a few), 3 (about half), 4 (most of them) or 5 (all of them).

Whether the father knows who the child is with when not at home is a second indicator of how actively the father monitors the child's whereabouts. Response choices are 1 (only rarely), 2 (some of the time), 3 (most of the time) and 4 (all of the time).

Fathers' participation in school activities is represented by a series of items such as whether the father volunteered in the classroom, office or library, had a conference with the teacher, had an informal conversation with the teacher, or attended a school event. Items were

taken from various educational surveys, including the 1998 NELS, the Early Childhood Longitudinal Survey and the National Household Education Survey (Hofferth et al. 1998). Fathers can respond 1 (not in current school year), 2 (once) or 3 (more than once). Factor analysis of the series of items revealed that the items for whether the father had a conference with the child's school principal, made a presentation to the child's class and met with the school counselor did not fit with the other items, so these were excluded, and the remaining eight items were combined into an index ($\alpha=.79$).

Setting limits for children is measured by items indicating the frequency that parents set limits on, for example, how much time children can watch TV in a day, which programs they can watch and how late they can stay up at night. Fathers can respond that they do these items 1 (never), 2 (seldom), 3 (sometimes), 4 (often) and 5 (very often). Factor analysis indicated that one item did not fit with the others—whether parents permit their children to watch TV during the evening meal, so the eight other items were combined into an index ($\alpha=.80$).

Table 8 shows mean scores on each of the detailed father involvement items for children living in intact versus nonintact families. The first half of the table shows items that reflect parental support and nurturing, and the second half presents items that represent parental control and monitoring. Overall, fathers report that they display a high level of warmth and affection toward their children, with fathers in intact families reporting slightly higher levels than fathers in nonintact families; on average, fathers in intact families do each of the items listed (except spending time doing one of the child's favorite activities) at least several times a week, and fathers in nonintact families do each of the items between once and several times a week. The frequency of fathers' doing household activities with their children is notably lower for those in both intact and nonintact families; going to the store, talking about family, and playing sports or

outdoor activities are done most frequently. On average, fathers talk to their children about different aspects of school from “occasionally” to “regularly,” with little variance observed; this could be because the answer choices are quite vague, and high regularity does not necessarily imply high frequency.

(Table 8 about here)

With respect to the measures categorized as control and monitoring, the average father in an intact family knows most of his child’s friends, and knows who his child is with most to all of the time. Fathers in nonintact families know about half of their child’s friends and know who their child is with most to all of the time. The extent to which fathers set limits varies—fathers are most likely to set limits on their children’s bedtime; they are least likely to try to control how their children spend time after school for fathers in intact families, and who children spend time with for fathers in nonintact families. With respect to school participation, fathers report relatively low levels of involvement, and for each item, participation by fathers in nonintact families is lower than that by fathers in intact families. Fathers are least likely to have volunteered at the child’s school.

Two regression models are estimated for how dimensions of fathers’ involvement are linked to father-child closeness for children ages 5 and older (this age range is selected so that the involvement variables for school-aged children can be used). Sampling weights are not used for these models because information on the involvement variables is gathered across interviews (i.e. fathers may be primary caregivers, other caregivers or absent fathers).¹² In the first model, the seven father involvement variables described earlier are included—warmth and affection, household activities done together in the past month, how many of the child’s friends the father knows by name and sight, how often the father knows who the child is with, how often the father

set limits on various behaviors, fathers' participation in school-related activities, and whether the father talks to the child about school. In model 2, various background variables are added. Whether the primary caregiver is the father is included in order to differentiate respondent effects of fathers reporting differently on closeness compared to mothers (and a very few nonparent caregivers). Child's race, age and gender are included as demographic controls. The nature of father involvement may differ within racial groups, fathers' interactions with their children likely varies by child's age, and fathers' involvement may differ for boys and girls. Also, an additional variable is included for whether the child has any physical or mental condition that prevents him or her from doing the usual childhood activities, attending school or doing regular school work (coded as yes or no); children with health problems may face limitations in their ability to share experiences and activities with their fathers. The number of other children in the household is included because fathers may be less involved with any given child to the extent that other children in the household compete for his time and resources. Mothers' education may be important because social desirability may lead more educated mothers to both encourage greater father involvement and to report higher levels of father-child closeness; also, because of homogamy in partnering, mothers' education is likely similar to fathers' education. Family economic status is important because fathers' involvement, and how involvement is linked to closeness, may differ between poor and nonpoor families.

Table 9 shows results for the models predicting father-child closeness for children in intact and nonintact families. For intact families, when the father involvement items are included alone (model 1), paternal warmth and talking with child about school are significantly and positively associated with closeness. Each of the other involvement measures has a small and statistically insignificant effect on closeness. When the control variables are added in model 2,

the size of the warmth effect increases somewhat due to the inclusion of race; black fathers display less warmth, on average, than fathers in other racial groups. Each one-unit increase on the warmth scale is associated with an increase in the average closeness score of 0.25 points (about one-quarter of a standard deviation on the overall mean). Also, talking with child about school remains marginally significant.

(Table 9 about here)

Among the background variables, black children are closer (of marginal significance) to their fathers than white children; this could be because black parents are less likely to marry such that those who do may be more invested in family and parenting relative to their white counterparts. Child's having a health limitation has a marginally-significant effect reducing father-child closeness.

For children in nonintact families, warmth is a very strong predictor of closeness (model 1). Doing household activities in the last month is linked to reduced closeness, and setting limits is associated with greater closeness. Participating in school activities has a marginally-significant positive association with closeness. In the second model, the magnitude of the warmth coefficient declines slightly but remains highly significant. Doing household activities becomes marginally significant, and the effects of setting limits and participating in school activities are no longer significant. Primary caregivers who are fathers report significantly higher father-child closeness compared to mothers or other caregivers. Father-child closeness is notably higher for black children and Hispanic children (the latter is marginally significant). Compared to children whose mothers have more than 12 years of education, those with exactly 12 years report higher father-child closeness. Number of other children in the household has a marginally-significant positive association with closeness; although not all of the other children

in the child's household are necessarily related to the father, it could be that nonresidential fathers who have multiple children in another household are more likely to remain close and involved than fathers with only one child. It is striking that poverty is associated with reduced closeness but only for children in nonintact families. This is consistent with previous literature that shows that economic stress is associated with less nurturing and consistent, and more harsh and punitive, parenting (McLoyd 1998; Lempers et al. 1989).

DISCUSSION

This analysis extends prior research by examining the extent to which father-child closeness mediates the relationship between family structure and child behavior, and by evaluating aspects of father involvement that may be positively linked to father-child closeness. Findings from the regression analyses predicting children's behavioral outcomes show a similar pattern—father absence initially has large and significant negative effects on children's behavior, as consistent with previous research. Compared to children living with both biological parents, children living in either of the three nonintact family types experience significantly higher levels of behavioral problems on at least one of the five outcome measures. The family type that appears to be most detrimental for children's behavior is the mother-only category; controlling for exogenous variables, children living in these family types score significantly higher on all five outcome measures. The mother-stepfather family type also has some negative effects—scores for children in this family type are significantly higher for two of the five outcome measures. Scores for children in "other" families are only significantly worse for one outcome (overall wellbeing); the lack of significant family structure effects may reflect that this group represents heterogeneous family experiences.

Contrary to previous studies that have found persistent effects of family structure on child and child behavior (e.g. Dawson 1991; Parcel and Menaghan 1994; Hoffmann and Johnson 1998), this research finds that after controlling for a wide range of factors, including father-child closeness, family structure is no longer shown to directly affect behavioral outcomes (beyond a marginally-significant effect of biological-mother-only family on the internalizing BPI). Thus, the models used in this analysis essentially “explain” how family structure affects child behavior. Family structure *does* significantly affect behavioral outcomes, and these effects are largely not spurious, as evidenced by the fact that only modest declines in the family structure coefficients are noted when exogenous controls are entered. However, family structure appears to affect behavioral outcomes for children mostly *indirectly*.

The results provide strong support for the role of father-child closeness in mediating the effects of family structure on child behavior.¹³ For all outcomes examined, the family structure effects notably decline in magnitude when father-child closeness is entered into the equations; many decrease in size such that they cross the line of statistical significance.¹⁴ Stated simply, findings from this paper indicate that part of the reason children living in nonintact families are disadvantaged is that they are less likely to have a high-quality relationship with their fathers than children living with both biological parents. This is not surprising given that proximity fosters more frequent and regular interaction which facilitates the development of close relationships.

What cannot be determined is whether nonintact family types *cause* lower father-child closeness or whether both are caused by a third factor, such as fathers’ poor relational skills, mental health problems, or substance abuse. Hetherington (1979) finds that among divorced families, there is little continuity in father-child interaction before and after the family separated

(closeness may either increase or decrease), indicating that the link between family structure and father closeness/involvement is not necessarily straightforward. Also, it cannot be unambiguously ascertained that greater father-child closeness necessarily *causes* improved behavioral outcomes because they may co-vary with another variable, such as shared genes or various characteristics of a stable, positive home environment that are not included in these analyses. Therefore, the conclusion that increased father-child closeness benefits children must be tempered with the caveat that this may not be true for all children; greater connection to fathers who have socio-emotional or other problems may in fact be detrimental to children's wellbeing.

The analysis of various dimensions of father involvement and father-child closeness highlights that fathers' behavior has an important link to the quality of relationship that they may develop with their children. While few of the other measures of fathers' involvement matter for closeness after background variables are included, fathers who display high levels of warmth and affection have closer relationships with their children, on average, regardless of whether they are in intact or nonintact families. Also, for children in intact families, talking about school with their father is positively linked to closeness. The negative association between doing household activities and closeness is puzzling; this may reflect the fact that different respondents are reporting on the two measures (mothers on closeness and fathers on activities), and to the extent that household activities with the child are done at the father's home, the mother may not be aware of such and hence may not "count" such interactions in her assessment of closeness.

Overall, fathers' supportive/nurturing behavior appears to have an important association with the quality of the father-child relationship, while behavior that demonstrates monitoring/control does not seem to have similar effects. It is important to note that a father's

display of warm and affectionate behavior may inherently reflect his personality and demeanor in ways that, say, participating in certain shared activities does not. Research on the determinants of fathering indicates that father's personal characteristics, social-contextual influences and child characteristics all influence fathers' involvement with their children (Belsky 1984 and 1990) and that fathers' personal characteristics may be most predictive (Woodworth 1996). It would be useful to further explore the extent to which supportive fathering behaviors (such as warmth and affection) are synonymous with or contingent upon certain personal characteristics of the father, or whether these types of behaviors can facilitate greater affective ties between fathers and children more generally.

LIMITATIONS

This research faces a number of limitations.

Reciprocal Causation. Family relationships are highly interdependent and reciprocal in nature, so we would expect children's behavior and wellbeing to influence parents' behavior and wellbeing, as well as vice versa (Demo and Acock 1996). However, one study that directly examined how early childhood behaviors affect parenting (Sampson and Laub 1993) found that while child conduct and temperamental problems affected subsequent parent control and discipline, children's behavior did not have an effect on the affective dimension of parenting; the emotional bond between parents and children (the aspect of parenting reflected in the closeness measures used in this paper) appears to be relatively independent of child effects. Adequate data are not available to directly test reciprocal effects in this paper, and the findings should be evaluated with the recognition that they may be affected by this limitation.

Contemporaneous measures. Because the data used in these analyses are cross-sectional, causal relationships cannot be inferred; only correlations can be observed. It would be useful to have historical information on family structure, father-child closeness and fathering behaviors. At the same time, it is likely that father-child closeness develops over time, so any current assessment of the relationship between fathers and children inherently reflects the history and development of that relationship.

Unobserved heterogeneity. Individuals with certain characteristics likely “select” themselves into particular family types (Demo and Acock 1996). Observed differences between persons in differing family circumstances may reflect pre-existing differences more than they demonstrate causal effects of family experiences themselves. In particular for this research, it is important to note that unobserved characteristics (e.g. commitment to family, religiosity, etc.) may predict both family structure and father-child closeness. Therefore, additional caution is warranted in inferring causal relationships.

Reporting by caregivers. Another limitation is that the measures of children’s behaviors are based on caregivers’ reports, which means that they reflect *perceptions* of children’s behavior instead of objective measurements of children’s actual behavior. Although first-hand measures of children’s behavior would be useful, research demonstrates that mothers (who are predominately the primary caregivers) do provide valid and reliable assessments about their children’s behavior (Bird et al. 1992; Richters 1992). Also, using mothers’ (since they are 94 percent of primary caregivers) reports of father-child closeness represents only one perspective on the quality of that relationship. Particularly for nonresident fathers, mothers’ and children’s reports of closeness may reflect different underlying dimensions of the construct (Smith and

Morgan 1994). In future research, it would be useful to conduct similar analyses using children's or fathers' reports about closeness.

Finally, because family structure, father-child closeness and children's outcome measures are all reported by the same individual (the primary caregiver), findings on how father-child closeness mediates family structure effects may be affected by shared method variance (Amato 1998). It would be useful to replicate these results for outcome measures reported by children themselves or another individual in the child's life. Shared method variance is less of a problem with respect to the analyses of how fathers' involvement is linked to father-child closeness because the father involvement items are reported by fathers themselves.

Absent father sub-sample. Because of the low response rate for absent fathers, detailed measures of father involvement were available for only a fraction of all absent fathers. These fathers are likely a selective group who are more attached to their children than are nonresidential fathers as a whole. Therefore, the estimates for how fathering behaviors are linked to father-child closeness may be biased.

CONCLUSION AND DIRECTIONS FOR FUTURE RESEARCH

This study adds to the existing literature by demonstrating the importance of the quality of the father-child relationship in understanding how family structure affects children's wellbeing. Children in intact families are much more likely to have a close relationship with their father than children in nonintact families, and a close father-child relationship is associated with improved child outcomes. Also, some aspects of fathers' behavior toward their children (particularly demonstrating warmth and affection) are associated with the quality of relationship that develops between them. It is possible that the detrimental effects of nonintact families could

be obviated by the maintenance of a close father-child relationship, implying that nonresidential fathers should be encouraged to maintain close ties with their children. At the same time and as previously noted, given the cross-sectional nature of these data, it is not possible to say that family structure *causes* reduced closeness. It could be that family break-up and lack of closeness are both affected by other characteristics of fathers.

This research raises several questions for additional research. Because there were not a sufficient number of father-only families available in the data set, it was not possible to examine nonintact father-headed families separately. To the extent that father-child closeness mediates the detrimental effect of family structure for children who do not live with their fathers, it would be interesting to evaluate whether the same is also true for mother-child closeness for children who do not live with their mothers. Descriptive analyses (not shown) point to a comparable pattern, that mother-child closeness is significantly lower in father-only families, while father-child closeness in such families remains high. The extent to which mother-child closeness may mediate absent-*mother* effects would shed light on the extent to which gender affects the consequences of parental involvement or lack of involvement.

This study also raises questions about how to characterize a high-quality relationship between parents and children. Fathers' warmth and affection is strongly associated with father-child closeness, while shared activities and monitoring behaviors are not. It could be that closeness per se reflects only *one* dimension of a strong and healthy father-child relationship; other dimensions could include items such as mutual respect and trust, or the ability to communicate effectively with one another. Further research is warranted on the dimensions of positive father-child relationships and which behaviors by fathers may promote the development of strong affective ties with their children.

ENDNOTES

¹ Throughout the paper, I use the term “intact” to signify two-parent families where both the biological mother and biological father live with the child and “nonintact” to represent all family types *other than* families with two residential biological parents. These terms are used because they are parsimonious and consistent with much previous research but are not intended to imply any value judgement.

² This figure does not include the 137 cases where the father was in jail, deceased, nonsample or foreign (Hofferth et al. 1998).

³ Low response rates are attributable to the primary caregiver’s refusal to provide contact information, inability to locate fathers for whom contact information was available, and refusals from fathers themselves once they were contacted (Hofferth et al. 1998).

⁴ For 94 percent of the children in the sample, the biological mother is the primary caregiver, for 3 percent their biological father fulfills this role, and for 3 percent an individual who is neither their mother or father serves as their primary caregiver.

⁵ Families with a mother and stepfather, and families with a mother and other father-figure, were combined in order to preserve a sufficient number of cases in the group. While ideally these two family types would be analyzed separately, descriptive analysis indicated that the two groups were similar. No significant differences in means between the two groups were found for all of the child outcome measures, for father-child closeness, and for various demographic characteristics. While this group includes both step and other father-figures, for simplicity, this family type is referred to as the “mother-stepfather” category throughout the paper.

⁶ Closeness to stepfathers is not analyzed in this paper; this is an important area for further research.

⁷ Research has shown that it is important to control for mother involvement in order to differentiate the unique contributions of fathers (Amato 1994 and 1998; Harris et al. 1998). Because the focus of this paper is how father-child closeness *mediates* family structure effects, mother-child closeness is not included here. In analyses not shown, mother-child closeness was found to be very high across all family types where the mother is co-resident, and thus closeness to mother does not operate as a mediator of family structure effects. Mother-child and father-child closeness are only modestly correlated (Pearson's $r=.149$, $p<.01$).

⁸ Missing values on mothers' education and the Pearlin mastery score are imputed, and two additional dummy variables to indicate that these variables were imputed are included in all regression equations (but not shown in tables).

⁹ Whether family structure effects are observed is sensitive to when variables are entered into the models (Biblarz and Raftery 1999), and adding father-child closeness after all other background variables have been included represents a conservative approach to whether father-child closeness does, in fact, mediate family structure effects.

¹⁰ I also created a dichotomy for a high versus low level of closeness and estimated logistic regression models. The substantive results were similar to those presented for the OLS models.

¹¹ While some of the items more clearly fall into one of the two dimensions (i.e. warmth and affection likely reflects parental support, and setting limits is one aspect of parental control), it was not inherently obvious how all of the measures should be categorized. The categorization used in this paper reflects one possible approach using these measures but is not intended as definitive.

¹² Through consultation with the PSID staff, it was determined that weights created for different questionnaires (i.e. primary caregiver, other caregiver and absent father) could not be combined.

¹³ Mother-child closeness was also examined (results not shown). Mother-child closeness does not significantly vary by family type and, thus, does not mediate family structure effects. Also, mother-child closeness does not negate the mediating role of father-child closeness, regardless of whether it is entered into the regression models before or after father-child closeness.

¹⁴ In addition, models were estimated predicting each of the behavioral outcomes with all of the independent variables included *except* father-child closeness (results not shown). For all of the outcomes, removing father-child closeness from the equations after all variables have been entered causes the magnitude of the family structure effects to increase, providing further evidence that father-child closeness serves as an important intervening mechanism between family structure and behavioral outcomes.

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