

The Transmission of Parenting from Fathers to Sons

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SYNOPSIS

Objective. Researchers address the extent to which parenting practices of fathers and mothers are associated with their sons' parenting behaviors as young adults, and whether adolescent behavior explains this association. **Design.** Data come from 409 young men interviewed in the 2006 Young Adult study of the 1979 National Longitudinal Survey of Youth. **Results.** Men whose fathers were positively involved with them when growing up report more positive parenting of their own children, a direct effect. Less harsh mothering and more positive fathering are associated with reduced adolescent behavior problems, and positive mothering is associated with positive adjustment of these young men as adolescents. However, neither adolescent problem behavior nor positive adjustment is associated with young men's fathering of their own children, and thus does not explain the association between the fathering young men received and their own fathering behavior. **Conclusions.** Men's parenting of their sons can have a long-term direct effect on how their sons parent their own children. Although parenting is associated with both positive and negative behaviors of sons during adolescence, these adolescent behaviors are not directly linked to later parenting behavior when sons have their own children. More research is needed to examine mediation mechanisms for the intergenerational transmission of parenting.

INTRODUCTION

Researchers document children experiencing increased levels of involvement with both residential and even nonresidential fathers (Bianchi, Robinson, & Milkie, 2006; Cabrera, Tamis-LeMonda, Bradley, Hofferth, & Lamb, 2000; Hofferth & Sandberg, 2001; McLanahan & Garfinkel, 2000; Sayer, Bianchi, & Robinson, 2004), but we do not know whether these children will in turn become more involved fathers as adults. At the present time, no methodologically rigorous research has identified the linkages between fathering patterns across generations. Although the continuity of parenting patterns has been investigated, to date most research has focused either on a "parenting" composite, aggregated across both mothers and fathers, or on parenting by mothers alone; almost no research has rigorously examined the cross-generational transmission specifically of *fathering distinct from mothering*. Research has changed our understanding of fathering dramatically over the past decades, but few past studies collected the information to be able to separate mothering from fathering. Fathers are also less responsive than mothers in surveys; participation rates have been lower for fathers, leading to concern about bias (Rendall, Clarke, Peters, Nalini, & Verropoulou, 1999).

An additional gap is that, because of its link to crime and delinquency, past research has focused on the transmission of harsh parenting practices across generations (Capaldi, Pears, Patterson, & Owen, 2003; Conger, Neppl, Kim, & Scaramella,

2003; Simons, Whitbeck, Conger, & Chyi-In, 1991). Although positive parenting may also be intergenerationally transmitted, the few studies that have examined this issue have not focused on fathers (Chen & Kaplan, 2001; Kerr, Capaldi, Pears, & Owen, 2009; Thornberry, 2005). Thus, past research has not fully answered a key question for those studying paternal parenting: Does experiencing positive fathering when growing up influence young men's parenting as adults?

Our analyses here investigate not only the direct pathway and total effects, but also the potential indirect effects of fathering through both positive and negative behaviors of sons in adolescence. Consistent with its link to the literature on deviant behavior, most previous research has focused on detrimental mechanisms, such as aggressive and antisocial behavior, through which parenting influences children during adolescence, but not on positive mechanisms of transmission of parenting. It is likely that increased positive father involvement in two-parent families will result in positive adolescent male development, and this could lead to more positive interaction with children, but this path has not been investigated.

In the present study, we examine three questions. First, what is the long-term association between contemporary young men's current parenting practices and reports of their own father's involvement with them while growing up? Second, is early childhood fathering associated with the positive and negative behaviors of these young men as adolescents? Finally, do these adolescent behaviors mediate any association between early childhood fathering and young men's fathering of their own children? The data were collected prospectively rather than retrospectively and from multiple reporters—parents, interviewers, and the young men themselves—in a nationally representative study spanning more than three decades.

Who are the Fathers in Children's Lives and How Do They Parent?

Fathers include biological fathers who live with or live apart from the child, but they may also include residential stepfathers. The positive contributions to child development of stepfathers as well as biological fathers have been well-documented (Amato, 2000; Amato & Booth, 1997; Pleck, 2010). Although some children have father figures who also contribute, such information is rarely available (Cabrera et al., 2000; Hofferth, 2006).

Fathers engage in activities such as caregiving, play, and cognitive stimulation; they are available or accessible to the children when needed; and they take responsibility for monitoring their children's well-being and behavior, making appointments, and managing their activities (Cabrera et al., 2000; Pleck & Masciadrelli, 2004). They also discipline the children. Research suggests that greater father engagement benefits children's achievement and behavior in the short term and in the long term. In the short term, it is associated with fewer behavior problems (Amato & Rivera, 1999). In the long term, fathers' involvement in family work, particularly child care, has been found to be associated with sons' greater closeness to their fathers, and greater community attachment and integration in young adulthood (Amato & Booth, 1997).

Two key dimensions of parenting style—acceptance/responsiveness and discipline/control—have been identified as important for child development (Maccoby & Martin, 1983). Acceptance, defined variously as feelings of warmth, closeness, connectedness, affection, responsiveness, and supportiveness, measures positive emotional involvement in a child's life and ranges from high to low. Discipline is defined by

its harshness, ranging from physical punishment (spanking) to more symbolic and reasoned punishment (such as time out) (Conger et al., 2003; Simons et al., 1991). The combination of acceptance with behavioral control (authoritative parenting) has been shown to result in the most favorable developmental outcomes (Steinberg, 2001). It is important to distinguish the two dimensions when modeling parenting across generations; the factors that affect discipline may differ from those that affect warmth (Simons et al., 1991).

Transmission of Parenting across Generations

How can parenting be transmitted across generations? We consider two major avenues of transmission of parenting across generations, one direct and one indirect (Capaldi et al., 2003). The direct path is a result of observational or social learning (Bandura, 1976). How one was parented as a child will affect how one parents as an adult. The earliest models of the determinants of parenting included an intergenerational link; young adults whose parents treated them harshly when they were young may treat their own children harshly (Belsky, 1984). Being hit or spanked leads to learning that hitting or spanking is appropriate and normal discipline, thus resulting in more physical punishment of one's own children. Conversely, experiencing warm, supportive parenting may serve as a model for how to care for and support one's own children.

The second potential path is indirect; having experienced less warm and more harsh parenting as a child leads to a higher level of aggressive behavior in interaction with others, which may result in aggressively parenting one's own children as a young adult (Simons et al., 1991). Conversely, higher parental warmth has been linked to less development of aggressive behaviors, particularly for at-risk youth (Scaramella, Conger, & Simons, 1999). Of the studies that have examined parenting and positive development, authoritative monitoring and control have been linked to positive adolescent development (positive interpersonal relations, social participation, positive self-concept, and academic success) (Chen & Kaplan, 2001; Kerr et al., 2009), which has been shown, in turn, to be linked to constructive parenting of one's own children (Chen & Kaplan, 2001; Kerr et al., 2009). Thus, positive parenting in the first generation leads to positive parenting in the second through positive adolescent adjustment.

In the following sections, we review research on the intergenerational transmission of harsh or positive parenting specifically from fathers, mothers, or both parents to sons, and describe other factors linked to parenting. We do not include research focused exclusively on daughters or on sons and daughters together. We focus on whose parenting (mothers, fathers, both) was assessed in the first (G1) and second (G2) generations, on the age of G2 when parenting by G1 and G2 were assessed, and who the reporters were. We also note sample sizes and how parenting was defined. In so doing, we establish the continuity of the present study with previous research, yet demonstrate its unique contribution.

Modeling Direct Effects of Harsh Parenting

The Oregon Youth Study recruited G2 boys from schools located in urban areas with higher-than-average delinquency rates (Capaldi et al., 2003). Poor G1 parenting skills (combining mothers and fathers)—a composite of poor parent-child relationships, poor monitoring, and harsh/inconsistent discipline—were measured when G2 was 9–10 and

11–12 years of age. G2's poor fathering skills in young adulthood with 22-month-old children (Generation 3 or G3) were assessed as harsh/inconsistent discipline. Harsh parenting behaviors were transmitted directly from G1 parents to G2 young men.

A number of studies used data from The Family Transitions Project, a longitudinal study of 558 lower middle to middle class European American youth and their families in Iowa, begun in 1989. Simons and colleagues (1991) examined the transmission of harsh parenting from grandparents (G0) to G2 children in grade 7 or 9 ($N = 451$). G1 children reported on G0 and their own harsh parenting, supplemented by G2 reports. In one of the first analyses to examine mothering and fathering separately, they found that for G1 men, their G0 mother's harsh parenting was directly transmitted to their own harsh parenting of G2, but there was no direct path from their G0 father's harsh parenting to their own.

Smith and Farrington (2004) used data from the Cambridge Study of Delinquent Development, a 24-year prospective study of offending in three generations of working class families in England involving 178 G2 male adults around 32 years of age in 1985, their G1 mothers and fathers, and their G3 children (boys and girls) ranging from birth to 15. The study examined the associations between G1 and G2 harsh parenting (authoritarianism, poor supervision, and lack of consistency) as well as the association of harsh parenting with antisocial behavior across generations. This is the only study other than Simons et al. (1991) in which G1 mothering and fathering were distinguished for at least some parenting measures but were combined for others; all of the G2 were males. According to the authors, G1 poor supervision (parents combined) predicted G2 fathers' poor supervision.

Modeling Direct Effects of Positive Parenting

Only three studies examined the direct effects of positive parenting on fathers. Thornberry and colleagues (Thornberry, Freeman-Gallant, Lizotte, Krohn, & Smith, 2003; Thornberry, 2005) analyzed 15-year longitudinal data from 210 G2 adolescents and their G1 parents in the Rochester Youth Development Survey, which oversampled high-risk youth residing in high-crime areas in 1988. Self-report measures of G1 mothers' positive parenting (defined as affective ties and consistency of discipline) were associated with G2 mothers' positive parenting, but not G2 fathers' positive parenting. When observational measures for G2 parenting were used to assess positive and negative parenting as independent dimensions instead of the G2 self-report scale, there were direct intergenerational links for fathers as well (Thornberry, 2005). G1 parents' positive parenting had a direct effect on G2 fathers' positive parenting, and G1 parents' negative parenting had a direct effect on G2 fathers' negative parenting.

Data from the Dunedin Multidisciplinary Health and Development Study of a 1972–73 birth cohort of New Zealand children, were used to study the parenting practices of 245 G2 children in their early twenties and with their own children under 5 from 1994–2003 (Belsky, Jaffee, Sligo, Woodward, & Silva, 2005). The focus was on predicting G2 mothers' and fathers' authoritative parenting, defined as warm, sensitive, and stimulating. The six measures of G1 positive and negative parenting (two each for early childhood, middle childhood, and adolescence) focused either on mothers or on both parents jointly. No aspect of G1 parenting was directly associated with G2 fathers' positive parenting.

A study examining positive or constructive parenting across generations (Kerr et al., 2009) also used data from the Oregon Youth Study described above. G1 constructive parenting, assessed when G2 was 9–12 years of age, was a combination of the reports of fathers and mothers on monitoring, parent involvement, positive parent–child relationships, and confident and efficacious discipline. It was not solely fathers’ parenting but represented parenting of fathers and mothers. G2 parenting was based on reports from both G2 fathers and G2 mothers of G2 fathers’ positive parenting. The results indicated that there was a significant direct effect of G1 constructive parenting on G2 constructive fathering of children in middle childhood.

Indirect Effects through Behavior Problems in Adolescence

All of the above studies also investigated potential indirect effects of G1 parenting on G2 fathering by testing the link between poor parenting by G1 and poor parenting of G3 by G2, both directly and indirectly through G2’s antisocial behavior or personality. We report how the mediating variables were defined.

Using the early waves of the Family Transitions project, Simons, Beaman, Conger, and Chao (1993) found that, for G1 men, the results supported the hypothesis that experiencing a harsh parenting style from one’s own father (G0) resulted in a hostile interpersonal style in adolescence, which led to harsh parenting of his own children. Capaldi et al. (2003) found that the transmission of parenting behaviors was mediated by G2’s delinquency.

Several studies found no indirect effects. Although he found that the relationship between G1 mothering and G2 fathering self-report was mediated by G2’s antisocial behavior, delinquency, and drug use, Thornberry (2005) did not find mediation using G2 parenting observational measures. Smith and Farrington (2004) also did not find evidence of mediation by G2’s antisocial behavior.

Indirect Effects through Positive Behaviors in Adolescence

Using data from the Oregon Youth Study described above, Kerr et al. (2009) investigated the transmission of positive parenting. The two mediating constructs were G2 adolescent positive adjustment (the mean of academic skills, peer relationships, and self-esteem) and antisocial behavior, based on parent and teacher reports on the Child Behavior Checklist and youth report on the Elliott Delinquency Scale. G2 constructive parenting was similar to the G1 construct, measured for fathers. The results indicated that, besides the significant direct effect of G1 mothers’ and fathers’ constructive parenting on G2 fathers’ constructive parenting, there was also an indirect effect on G2 fathers’ constructive parenting through G2 positive adjustment, but not through G2 antisocial behavior.

Family Structure Transitions also Influence Parenting

Fathers do not remain constant in children’s lives. Family structure during G2’s childhood is expected to have an important impact on the intergenerational transmission of parenting. Family structure affects family processes in the home, which influence parenting by the G1 and indirectly, then, parenting by the G2. Conger and Elder Jr. (1994) clearly demonstrated the influence of parental conflict on parenting of children.

Separation and divorce disturb parenting; however, the transition to a stepparent family may also be unsettling and alter family processes (Hofferth & Anderson, 2003). Thus, it may not be the *type of family* that matters to parenting and family process but the *number of disruptions* (Capaldi & Patterson, 1991; Wu & Martinson, 1993). In terms of previous literature, most do not distinguish family structure events and changes during childhood in examining the influence of G1 parenting on G2 parenting. Thus, we make a contribution by explicitly including the influence of family transitions on G2 fathering.

Limitations of Past Research and Contribution of the Present Study

Multiple studies have examined the intergenerational linkage of both harsh and positive parenting of mothers and fathers combined across generations, utilizing different data sources for G1 and G2 parenting. Both direct effects and indirect effects through the behavior problems or positive behaviors of the G2 have been documented, although not in every study. Only two rigorous studies separated G2 fathering from G2 mothering, and also collected information specifically on G1 fathering: The Family Transitions Project study of Iowa families (Simons et al., 1991) and the Cambridge Study of Delinquent Development (Smith & Farrington, 2004). Both focused on harsh fathering. The Simons et al. study found only an indirect effect of G1 harsh fathering on G2 harsh fathering through G2 hostile interpersonal style in adolescence; no direct effect was observed. The Smith and Farrington study also failed to find evidence of the direct transmission of harsh parenting style from G1 fathers to G2 fathers. Neither study examined positive fathering or potential positive mediators. No study has examined the potential transmission of positive parenting from father to son through positive adolescent behaviors. Thornberry (2005) examined direct effects, but the mediators were negative behaviors such as delinquency, antisocial behavior, and drug use. Kerr et al. (2009) examined positive parenting of G2 fathers, but G1 included both mothers and fathers.

It is clear that research has not yet examined the intergenerational transmission of positive parenting from father to son separately from mother to son. The present study makes a unique contribution to the literature by testing the link between the fathering behavior of the G1 and the fathering behavior of the G2 (both negative *and* positive), as mediated by both the negative *and* positive behaviors of the G2 fathers during adolescence. The unique contributions of this study are the separate measurement of fathering and mothering among G1 parents, the assessment of father involvement of G2 residential fathers, the examination of both positive and negative pathways in adolescence, and the use of a nationally representative sample.

Hypotheses

We hypothesize that (1) maternal and paternal parenting (G1) directly influence fathering by the child generation (G2); (2) maternal and paternal parenting directly influence the behavior problems and positive behavior of boys in adolescence; (3) behavior problems and positive behavior of boys in adolescence will be associated with G2 fathers' positive and harsh fathering as young adults (that is, the effects of G1 parenting on G2 fathering are indirectly linked through behavior problems and positive adolescent behavior); (4) having experienced more family structure transitions while

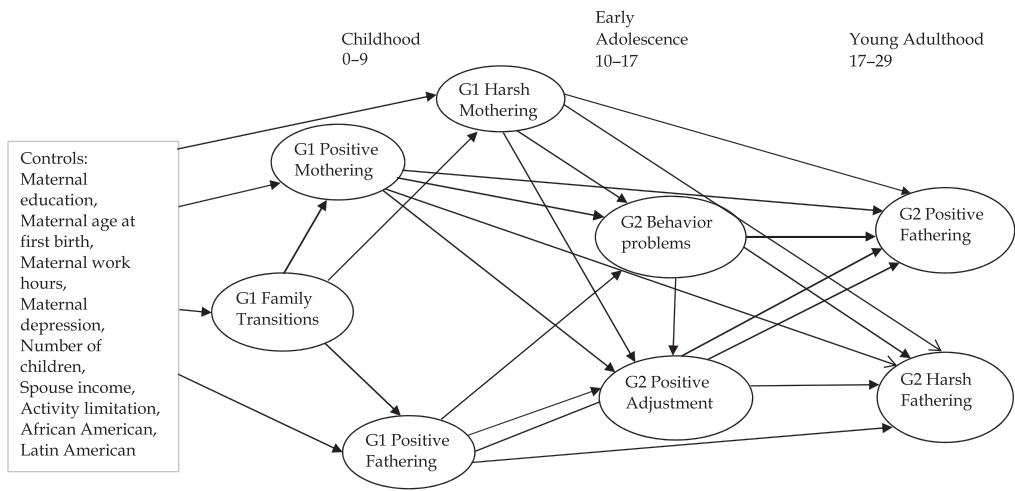


FIGURE 1

Conceptual model for intergenerational transmission of parenting from fathers and mothers to sons.

growing up will negatively impact G1 positive mothering, increase G1 harsh mothering, and reduce G1 positive fathering; and (5) behavior problems and positive behavior will be negatively linked in adolescence. Figure 1 depicts the relations among variables specified in the hypotheses. We simultaneously model the influence of maternal and paternal positive and harsh parenting on G2 parenting through both positive adjustment and antisocial paths across adolescence.

In testing our hypotheses, it is important to control for other factors shown in prior research to be related to parenting. These are drawn from Belsky's (1984) conceptualization of parenting as dependent on the personal psychological resources of the parents (e.g., depression, education), characteristics of the child (e.g., health), and sources of stress and support (e.g., work hours, income, number of children). We utilized a diverse national sample of children followed up to 24 years to separately examine the influences of G1 mothering and G1 fathering on G2 residential fathering behavior when children are in early and middle childhood.

METHOD

Sample: 1979 National Longitudinal Survey of Youth (NLSY79)

In this analysis, we used data on young adult male children of female youth interviewed in 2006 as part of the 1979 National Longitudinal Survey of Youth. The NLSY79 data sets contain information on two generations of youth, men and women aged 14-21 years in 1979, whom we call G1, and the women's own children, G2, now in their late teens and twenties. The NLSY obtained detailed information from the mother about her relationship with her child every other year beginning in 1986, and beginning in 1988, obtained information from the children themselves as they entered adolescence (10-14). In 1994, these same children, then 15 and older, were interviewed as respondents in a separate but linked Young Adult Study; the most recent data available to us

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were collected in 2006. In the first phase of sample selection, we included children born from 1975–1987 to NLSY mothers, and who were between 17 and 29 in 2006 ($N = 1,915$). Children younger than age 16 in 2006 were unlikely to have become fathers. Youth who were older than 29 in 2006 were born prior to 1977, and would have missing data for the first two or more years of their lives. The second stage of sample selection identified 409 G2 men who had become fathers by 2006 and who were living with at least one child age 0–9. Men who were not living with any of their children (185) could not be included. The maximum age of 9 was selected to make child ages at G2 parenting comparable to those at which G1 parenting was assessed.

Our sample, therefore, consists of the 409 G2 men who had become fathers by 2006 and who were living with at least one child. Intergenerational research has generally ignored the issue of whether men live with their children. Researchers who examined factors associated with the transition to first residential or nonresidential fatherhood (Hofferth & Goldscheider, 2010) found that young men who were poor, African American, and who had experienced multiple transitions when growing up were more likely to become nonresidential than residential fathers, and that this influence operated through parenting practices. To address selectivity, we control for the influence of ethnicity, family income, and number of family transitions on G1 parenting. Early exploratory analyses showed ethnic differences only in G1 parenting, not in adolescent behaviors or in G2 fathering. Of course, there may be interactions such that the association between G1 parenting and G2 parenting varies by ethnicity. Unfortunately, the sample size is insufficient to test for model invariance across groups.

We created a data set with G2 residential fathers' detailed reports of their parenting in 2006 in young adulthood; their behavior and circumstances had been self-reported from age 10–17, together with information reported by the mother (G1) and interviewer for earlier years. G1 respondents (mothers) provided information about their own parenting and that of the child's residential or nonresidential biological father when the child was under age 10. Because G1 mothers' reports about the biological father's parenting were limited, we included the G2 adolescent's report about his relationship with his father at that time. Our data about G1 parenting have the advantage that they were collected during the G2's childhood, and that the fathering measures refer to the biological father, residential or nonresidential.

Measures: Positive and Harsh Mothering (G1)

Mothering consists of four items assessed when the G2 young man was 3–5 years of age. If multiple observations were available during this period, the observations were averaged.

Positive mothering. The two positive mothering items come from the HOME interview observation by the interviewer (Bradley & Caldwell, 1984). At the end of the interview, the interviewer was asked: "Did the mother converse with the child twice or more?" and "Did the mother's voice show positive feelings about the child?" These indicators of responsiveness and warmth, coded as *yes* (1) or *no* (0), were averaged over the number of assessments, and thus represent the proportion of assessment years the interviewer reported that the mother conversed with the child or expressed positive feelings. These items constitute a trained observation rather than a self-report by the mother, and therefore are less biased than the latter (Yeung, Linver, & Brooks-Gunn, 2002).

Harsh mothering. Harsh mothering was measured by two items regarding discipline, also from the HOME. The mother was asked how often she spanked the child in the last week, with a frequency ranging from 0–15. She was also asked a hypothetical question about how she would respond if she were hit by the child. If she sent the child to his room, talked to the child, ignored him, gave household chores, took away allowance, or held the child's hand until calm, the response was coded as *not harsh* (0). A response of hitting back or spanking was coded as *harsh punishment* (1). This measure was averaged over all available waves of data, so harsh punishment is interpreted as the proportion of assessment years in which harsh punishment was used.

Positive Fathering (G1)

Number of decisions the father makes. This variable reflects the dimension of paternal monitoring and control. From 1988–2002, the G2, who were then 10–14, were asked how often their biological father (G1; wherever he lived) was involved in the following six decisions regarding them: whether the child has a curfew, how the child spends his own money, how much TV the child watches, who buys the child's clothes, which friend to go out with, and who provides religious training. Each item was coded 1 (*biological father involved*) or 0 (*biological father not involved*), and the items were summed to indicate the number of decisions in which the father was involved (range: 0–6). The latest survey year in which data were available was used so that only the most recent report on each child was included. Nonresident biological fathers could be reported as involved in decisions. In the few cases in which no biological father was reported, a stepfather report was substituted.

Father cared for child. As our second measure of fathering received by G2, for each year the child was 0–9 years old, we used the G1 mother's report of whether the biological father (G1; whether resident or not) cared for the G2 child during the time when the mother worked. This variable represents paternal involvement in caregiving. Nonresident biological fathers could be reported as providing care. For each child, we calculated the proportion of the assessment years in which the father cared for him or her. If the mother never worked, this was coded 0; only 8% were never employed over the child's first 10 years. This may appear to underestimate the time men married to unemployed mothers spent in the care of children; however, when these data were collected in the early 1980s, such men spent very little time in direct child care (Bryant & Zick, 1996).

As described later, the study's measures of G2's fathering of G3 are based on self-reports. The potential for same-informant shared variance in the association between the measures of G1 and G2 fathering, a critical issue for the study, is minimized because one of the indicators for G1 positive fathering is from a different source (G1 mother), and there is a time gap of almost a decade between G2's reports about parenting received and their own fathering.

Family Transitions (G2)

Consistent with other research (Capaldi & Patterson, 1991), the number of family structure changes in the household when the child was 0–9 was the measure of family transitions. Because the sample is followed longitudinally, a measure of transitions in

family structure is more appropriate and meaningful than a measure of family structure at any one point in time (Hofferth & Goldscheider, 2010).

Fathering (G2)

In 2006, the NLSY asked G2 fathers three parenting questions assessing dimensions comparable to those assessed for mothers. *Harsh fathering*, how often in the last week the young adult spanked the child, was measured similarly for G1 mother and G2 father. The measure of *positive fathering*, how often in the last week the young adult reported that he praised the child and how often in the last week the young adult reported showing the child physical affection was measured on a continuous interval scale, whereas it was an interviewer-observed dichotomous report (whether observed or not) for G1 mothers. The spanking, praise, and physical affection items were each divided by a constant to rescale them (Muthén & Muthén, 2008). Additionally, a log transformation was applied to praise and affection, but it was not applied to spanking so as to keep the latter consistent with the G1 maternal report. NLSY fathers may have multiple residential children. In order to measure parenting of a similar age child across the two generations, our first priority was the father's report on his parenting of a 3- to 5-year-old, second was a 0- to 2-year-old, and, third, a 6- to 9-year-old. As a result, 42% of our children were 0-2, 40% were 3-5, and 17% were 6-9 years of age.

Behavior Problems (G2)

Two indices were included to measure adolescent behavior problems: externalizing behavior and discipline problems.

Externalizing behavior. Externalizing behavior was the average of 18 items from the 30-item Behavior Problems Scale reported by the mother when the child was 10-14. The questions, drawn from the Achenbach Child Behavior Checklist, were selected for use in the NLSY (Peterson & Zill, 1986) and split into externalizing and internalizing subscales (Rogers, Parcel, & Menaghan, 1991). The items included having trouble getting along with other children, bullying, cheating or telling lies, being disobedient, and arguing too much. Items were coded 0 = *not true*, 1 = *sometimes true*, and 2 = *often true*. The score averaged over ages 10-14 was used if multiple responses were available. Cronbach's alpha for this scale was .86.

Discipline problems. This index was the average of 9 items asked of G2 adolescents in a self-administered questionnaire when they were 10-14: (1) stayed out later than parents said, (2) hurt someone bad enough to need a doctor, (3) lied to parents about something important, (4) took something without paying, (5) damaged school property on purpose, (6) got drunk, (7) parents had to come to school, (8) skipped school without permission, and (9) stayed out one night without permission. Item responses ranging from 0 = *never* to 3 = *more than twice* were drawn from the most recent participation year. Cronbach's alpha for this scale was .74.

Positive Adjustment (G2)

At the time the data were collected, few guidelines for measuring the positive adjustment of adolescents existed, so a variety of measures were explored. Consistent with

previous research on the importance of motivation to students' achievement (Wolters, Pintrich, & Karabenick, 2005), the constructs of self-efficacy and task persistence were included in the final model. Attendance at religious services, which ties the youth to a larger community and has been shown to be associated with lower levels of many types of risk behaviors (Benson, Scales, Sesma Jr., & Roehlkepartain, 2005), was added. These three constructs, although by no means a comprehensive scale of positive adjustment, capture a few of the major dimensions described in the literature that are linked to a successful transition to adulthood (Moore & Lippman, 2005).

Self-efficacy. Starting at age 15, the G2 adolescent responded to seven questions about his feeling of control over his life. These items include (1) There is no way I can solve my problems (reversed); (2) Sometimes I feel I'm being pushed around (reversed); (3) I have little control over what happens to me (reversed); (4) I can do just about anything I set my mind to; (5) I often feel helpless dealing with life's problems (reversed); (6) What happens to me in the future mostly depends on me; and (7) There is little I can do to change important things in my life (reversed). Answers ranged from 1–4, with 1 indicating the most negative, and 4 the most positive response. In the case of multiple observations, the earliest young adult response was taken to locate it in adolescence. The total score is the sum of all items. The original range was 7–28; however, it was scaled by dividing by 7. Cronbach's alpha for this scale was .71.

Persistence is the interviewer report of the child's persistence in test-taking, taken during the 10–14 age period. The interviewer coded persistence as (1) poor, (2) poor to average, (3) average, (4) average to excellent, or (5) excellent.

Religious attendance is based on a question asking how often the G2 adolescent attended religious services in the past year when he was 10–14. Codes were (1) not at all, (2) several times a year or less, (3) about once a month, (4) two to three times a month, (5) about once a week, and (6) more than once a week. This score was taken from the latest year in which the child answered the self-administered questionnaire for 10- to 14-year-olds.

Background and Control Variables

All background variables were measured from birth to age 9. The annual earnings from wages and salary of the G1 mother's spouse were averaged over all years from age 0–9 in which data were available (if no spouse in a year, spouse income was coded 0 for that year). This variable, in 2006 dollars, was scaled by taking the natural log. Mother's weekly work hours (annual hours divided by 50) were also obtained during each calendar year and averaged over the time the young adult was 0–9; again the natural log of hours was used. Mother's education was the average completed years of schooling during the time that the young adult was 0–9. Father's education had too much missing information to include. The number of children was the average number of children in the household during the time that the G2 young adult was 0–9.

Several items were measured only once. The G1 mother's depressive symptoms were measured by a 20-item scale from the Center for Epidemiologic Studies (CES-D; Radloff, 1977). This scale, which was only asked twice in the study, was taken from the 1992 wave, prior to measuring adolescent behaviors and young adult parenting. Responses range from 0–3, with 3 indicating greater depressive symptoms. The total score ranged from 0–60, and was scaled to the other variables by dividing by 10. The

mother's age at first birth is a key variable calculated by the NLSY staff. Because of the strong correlation between mother's age at first birth and the current age of the young adult that was a consequence of the NLSY sample design, we included only the mother's first birth age. This measure was also strongly related to the age of the child, because younger adults had younger children. As a proxy for child health, we included a variable for whether the G2 young adult had a condition as a child that limited usual childhood activities (1 = *yes*, 0 = *no*).

Analytic Strategy

Using this model, we examine direct and total effects of G1 mothering and fathering on G2 fathering as a young adult. We also examine indirect effects via G2 adolescent behavior problems and positive adjustment. We do not attempt to additionally examine indirect effects via variables such as G2 educational, employment, or marital circumstances, or stress or depression, as we frame our study within existing intergenerational research focusing on youth behavior and adjustment mediators, and these additional potential mediators would greatly increase the number of paths being estimated.

We first describe characteristics of the sample. Second, we present the measurement model. Except for family transitions and the dependent variable of G3 father discipline, all the constructs are latent variables, each with several indicators. One of the paths from each latent construct to its indicators is fixed to 1.0 in both the factor analysis and the structural model so that its variance can be estimated. Model fit is evaluated using the comparative fit index (CFI) that compares the hypothesized model to a model with no relations between variables and the root mean square error of approximation (RMSEA) that compares the model to the projected population covariance matrix. The CFI ranges from 0–1.00, with a cutoff of .95 or higher indicating a model with a good fit, and .90 indicating a model with an adequate fit (Byrne, 1994). RMSEA values below .05 indicate a good model fit, and values between .05 and .08 indicate an adequate fit (Byrne, 1994).

We then present the structural model, shown in Figure 2. All relationships and missing values on individual items were estimated jointly using full information maximum likelihood in Mplus. The proportion of missing data was less than 5% for most items. Ten percent were missing father decision-making, child discipline problems, health limitation, and religious attendance. The father's income when the young adult was growing up was missing for about 23% of cases. We conducted a missing value analysis of variables with 5% or more missing data using SPSS. Based on Little's MCAR test, we were unable to reject the hypothesis that the data were missing completely at random ($p [279] = .117$). There were no significant differences in G2 parenting between cases missing on paternal decision-making, delinquent acts, religious attendance, paternal income, and maternal spanking, and cases not missing on those variables.

Finally, we discuss the association of background variables with G1 mothering, G1 fathering, and family transitions. In early analyses, we found that the background variables did not directly influence behavior problems, attitudes, or later young adult fathering, but operated through mothering and fathering in early childhood. These variables are included in the structural model and a table, but are not shown to improve readability.

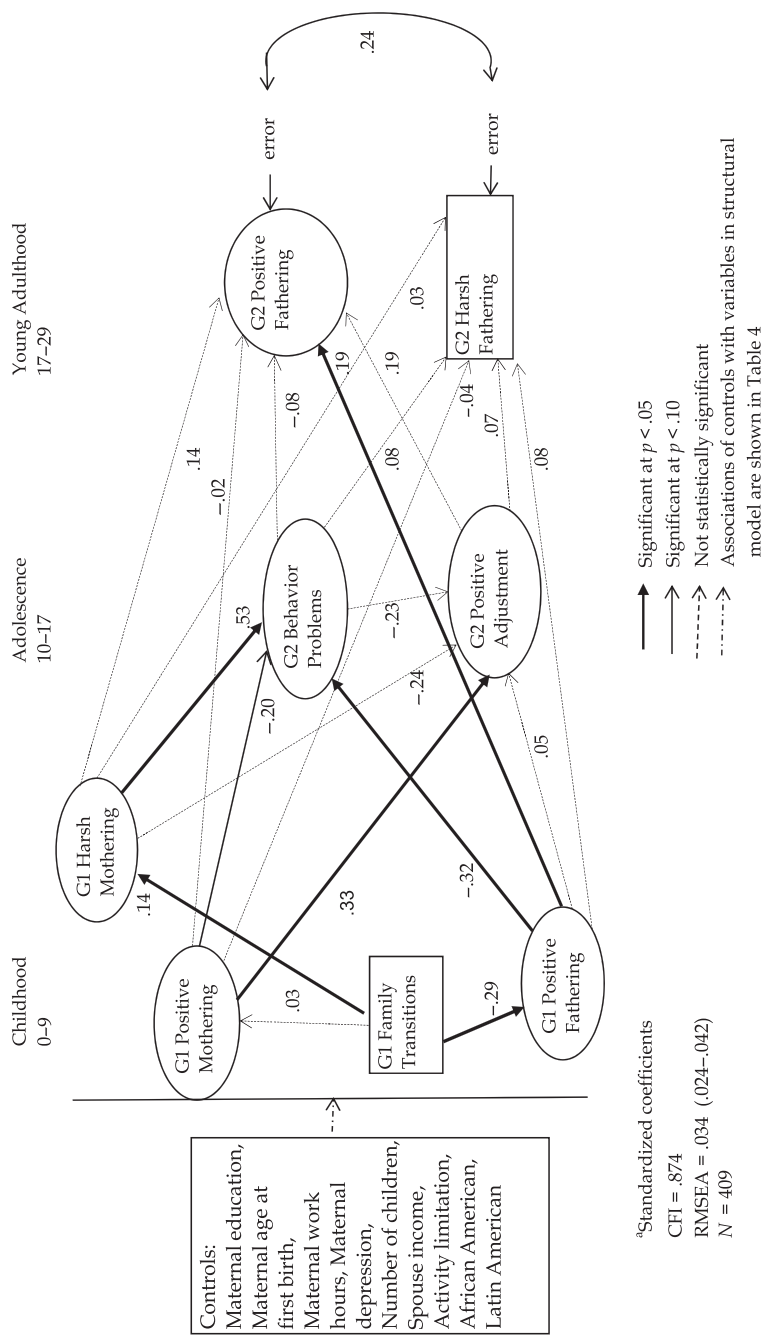


FIGURE 2
 Full intergenerational transmission structural model.^a

RESULTS

Sample Characteristics

Because the study sample of young fathers (Table 1) is relatively disadvantaged, we compared it to the entire sample of young men aged 17–29 in the 2006 wave of the NLSY Young Adult study (not shown), including those without children. The young men in our sample were born to mothers who averaged 18 years at first birth, compared to 20 for the entire sample, and whose education averaged 11 rather than 12 years of school. The average age of the young adults in our sample was older (25 years compared with 22 for the full sample). The average income of the mother's spouse was \$19,400 compared with \$28,000 for the full sample. Latin American and African American young fathers comprised 63% of our sample, only slightly higher than a sample that included all NLSY young adults of this age (58%), because of the oversampling of minorities in the NLSY and the fact that the majority were the children of early child bearers. Mothers' work hours per week while the child was young (15) and the average number of children in the household (2.14) were each about the same for this sample of fathers as for all young men. Mothers did not have high levels of depressive symptoms (12.6). The average number of family transitions (1.54) was slightly higher for this sample than for the full sample (1.32). The results of this comparison suggest that although the sample is more disadvantaged, it is not strikingly different from the entire sample of young men aged 17–29 in 2006, including those without children.

The mothers of these young men exhibited positive parenting when their children were aged 3–5. In 78% of the interviews, on average, they showed positive feelings about the children and in 83% they conversed with the children, according to the interviewer. At the same time, mothers also displayed some harsh parenting. Mothers reported that they spanked their children about once in the last week, and about half the time they reported a harsh response to a hypothetical situation in which their children hit them. Fathers provided care for their children during about 8% of the years when the children were under age 10, and fathers were reported to have been involved in one decision related to the children as adolescents, on average.

Young adult fathering was quite positive. Fathers reported that they expressed affection four times a day on average, and praised their children at least twice a day (from original variables, not shown). In contrast, they reported spanking their children less than once in the past week.

The correlations among all the variables in the structural model (top panel), and between control variables and the variables in the structural model (bottom panel) are shown in Table 2.

Measurement Model

Table 3, column 1, shows the confirmatory factor analysis (CFA) model that simultaneously includes all factors, indicators, and control variables, and that allows correlations among factors and control variables but no structural relations. The results show that the measurement of each latent construct was good, with all the loadings except two above .30. In spite of the low loading for attendance at religious services (.17), the positive adjustment factor fits the data well in both CFM and joint SEM models. Spanking was the best indicator of mother's harsh discipline, and responsiveness the best indicator

TABLE 1
Descriptive Statistics of Variables

Variable	<i>N</i>	<i>M</i>	<i>SD</i>	Range	Reporter
Background					
African American	409	.35	.48	0-1	Mother
Latin American	409	.28	.46	0-1	Mother
Activity limitation	369	.02	.15	0-1	Mother
Age of mother at first birth	407	18.27	2.36	13-28	Mother
Maternal depression	394	1.26	1.07	0-5.5	Mother
Income of mother's spouse (ln)	314	9.06	2.47	0-11.91	Mother
Maternal weekly work hours (ln)	409	2.25	1.18	0-4.06	Mother
Number of children in household	409	2.14	.97	.25-7.25	Mother
Maternal education	409	11.06	1.95	4-16	Mother
Structural variables					
G1 family transitions					
Number of family transitions	402	1.54	1.74	0-8	Mother
G1 positive mothering					
Proportion of years showed positive feelings about child	407	.78	.29	0-1	Interviewer
Proportion of years conversed with child	407	.83	.29	0-1	Interviewer
G1 harsh mothering					
Number of times spanked child in past week	388	1.17	1.69	0-15	Mother
Would respond harshly if hit by child	397	.48	.47	0-1	Mother
G1 positive fathering					
Number of decisions father made about the child	371	1.19	1.54	0-6	Adolescent
Proportion of years father provided child care	409	.08	.16	0-1	Mother
G2 behavior problems					
Externalizing behavior problems (average)	393	.52	.32	0-2	Mother
Discipline problems (average)	360	.58	.50	0-3	Mother
G2 positive adjustment					
Efficacy	405	3.07	.43	1-4	Adolescent
Persistence	408	3.84	.63	1-5	Interviewer
Religious attendance	353	3.24	1.91	1-6	Adolescent
G2 positive fathering					
How often showed affection to child in past week (ln)	403	1.40	.84	0-3.25	Young adult
How often praised child in past week (ln)	400	1.33	.86	0-3.92	Young adult
G2 harsh fathering					
Number of times spanked child in past week	406	.88	2.11	0-21	Young adult
<i>N</i> (with full information maximum likelihood estimation)	409				

Note. ln = natural logarithm.

of young adult positive fathering. The fit for the entire model was acceptable. The CFI of .99 for the full model is high, and the RMSEA of .01 is in the good range.

The measurement model from the full structural model is shown in the third column of Table 3. Differences are minor, with one exception: The loading of maternal spanking on harsh mothering declined, and that of harsh discipline increased. The CFI of .87 for the fit of the full model is lower than the ideal criterion of .90; however, the RMSEA of .03 indicates a good fit.

TABLE 2
Correlation Matrix for Structural Model

	G1 Warm	G1 Responsive	G1 Spank	G1 Harsh	Transitions	Decisions	Child Care	External	Discipline	Efficacy	Persistence	Religious	G2 Warm	G2 Responsive	G2 Spank
Structural model															
G1 warm	—														
G1 responsive	.45	—													
G1 spank	-.14	-.09	—												
G1 harsh	-.10	-.09	.27	—											
Transitions	.03	.04	.08	.05	—										
Father decisions	.04	.02	-.05	-.01	-.23	—									
Father child care	.03	.07	.06	.00	-.15	.09	—								
Externalizing	-.05	-.05	.20	.12	.03	-.05	-.06	—							
Discipline problems	-.05	-.06	.23	.03	.12	-.10	.00	.20	—						
Efficacy	.01	.07	.01	-.04	.02	-.01	-.03	-.14	-.16	—					
Persistence	.12	.08	-.16	-.10	-.08	.10	.00	-.14	-.16	.21	—				
Religious attendance	-.06	-.03	-.07	.14	-.06	.08	-.03	-.10	-.08	.17	.12	—			
G2 warm	-.06	.04	.09	.02	-.09	.14	.10	.01	-.07	.01	-.09	.05	—		
G2 responsive	-.09	.01	.19	.05	-.06	.18	.16	.00	-.12	.12	-.02	.03	.62	—	
G2 spank	-.05	-.09	.04	.06	-.02	.01	.05	-.04	.09	-.04	-.05	.05	.05	.16	—
Controls															
Mother education	.03	.07	.05	.02	-.14	.12	.25	-.04	-.07	.04	.08	-.03	.07	.09	-.02
Mother first birth age	.07	.03	-.02	-.07	-.05	.20	-.01	.03	-.06	-.06	-.10	.02	.03	.03	.00
Mother work hours	.01	.01	-.13	-.04	.02	-.08	.26	-.16	.06	.06	.04	-.04	-.04	.03	.02
Mother depressed	-.03	.04	.11	.12	.09	.01	-.07	.24	.04	-.01	.06	.01	-.13	-.12	-.02
Number of children	-.12	-.04	.32	.23	-.10	.05	.05	.07	.07	-.06	-.23	.02	.06	.08	.02
Spouse income	-.03	-.03	-.10	.01	-.26	.09	.09	-.14	.02	-.05	.09	-.02	-.09	-.05	.03
Health limitation	-.02	.01	-.04	.07	.11	-.04	-.03	.04	.01	-.09	-.02	.00	-.06	-.02	.05
African American	-.02	-.01	.16	.22	.12	-.15	.02	-.09	-.01	.00	-.06	.21	.06	-.07	-.04
Latin American	-.02	-.09	-.06	-.17	.00	.01	-.13	-.03	.03	.00	-.01	-.07	-.14	-.11	-.09

Note. N = 232, complete cases only; correlations among controls not presented but available from first author.

TABLE 3
Measurement Model, Standardized

Items	Factor Loading		
	CFA Alone, No Structural Model	CFA in Full Structural Model Without Controls	CFA in Full Structural Model
G1 positive mothering			
Mother warm	.73	.71	.70
Mother responsive	.65	.67	.67
G1 harsh mothering			
Mother spanked child last week	.92	1.00	.63
Mother harsh discipline	.29	.26	.42
G1 positive fathering			
Number of decisions	.42	.33	.36
Cared for child	.43	.54	.46
G2 behavior problems			
Externalizing behavior problems	.47	.44	.47
Discipline problems	.43	.47	.44
G2 positive adjustment			
Efficacy	.38	.33	.29
Persistence	.58	.65	.73
Religious attendance	.17	.19	.15
G2 positive fathering			
Number of times showed affection	.38	.59	.47
Number of times praised child	.93	1.00	.93
G2 harsh fathering			
Number of times spanked	na	na	na
CFI	.99	.99	.87
RMSEA	.01 (.00-.03)	.01 (.00-.03)	.03 (.02-.04)
N	409	409	409

Note. na = not applicable; observed, not a factor indicator.

Structural Equation Model

We now focus on the full structural model in Figure 2, not considering the contribution of family transitions and background controls. These associations are discussed later.

G1 fathering on G2 positive fathering: Direct effects. Figure 2 shows a direct effect of G1 positive fathering on G2 positive fathering, $\beta = .19, p < .05$. Young men whose fathers were more positively involved in rearing them reported more positive fathering behaviors than those whose fathers were less involved. This is represented by a bold arrow from G1 positive fathering to G2 positive fathering.

No significant direct effect of G1 positive mothering or G1 harsh mothering on G2 positive fathering was found. The coefficient for G1 positive mothering was small; the coefficient for G1 harsh mothering was larger, but still not significant. These nonsignificant associations are shown in Figure 2 by dashed lines.

G1 mothering on G2 positive fathering: Indirect effects through G2 behavior problems. As expected, G1 positive mothering was associated with reporting fewer behavior

problems in her adolescent child, $\beta = -.20, p < .10$, whereas G1 harsh mothering was linked to reporting more behavior problems, $\beta = .53, p < .01$. Positive fathering was also associated with a mother reporting her adolescent having fewer behavior problems, $\beta = -.32, p < .001$. The significant pathways from positive mothering, from harsh mothering, and from positive fathering to G2 behavior problems are represented in Figure 2.

Surprisingly, there was no significant association between G2 behavior problems as an adolescent and G2 positive fathering. The associations were in the anticipated directions; behavior problems had a negative association with positive fathering, but the coefficient was small and nonsignificant. Because there was no significant path from behavior problems to G2 positive fathering, there was no indirect effect through behavior problems.

G1 mothering on G2 positive fathering: Indirect effects through positive adjustment. G1 positive mothering was associated with significantly more reported positive adjustment of G2 when they were adolescents aged 10–17, $\beta = .33, p < .001$ (Figure 2). The association between G1 harsh mothering and G2 positive adjustment was large and in the expected direction (negative), but was not statistically significant. G1 positive fathering was positively related to reported G2 positive adjustment, but the coefficient was small and not statistically significant. The association between G2 behavior problems and G2 positive adjustment was large and negative, as expected, but not statistically significant. Thus, G1 positive mothering was the only construct significantly associated with G2 adolescent positive adjustment.

Surprisingly, there was no significant association between G2 positive adjustment and G2 positive fathering. The association was relatively large and in the expected positive direction ($\beta = .19, p = .15$), but did not reach statistical significance at the .05 level. Thus, there was no significant indirect effect of G1 mothering or G1 fathering on positive fathering through positive adjustment because there was no effect of G2 positive adjustment on G2 positive fathering.

G1 mothering and fathering on G2 harsh fathering: Direct effects. No significant associations between G1 positive fathering, G1 positive mothering, or G1 harsh mothering and G2 harsh fathering were found (Figure 2). All of the coefficients were small.

G1 mothering and fathering on G2 harsh fathering: Indirect effects. There were no indirect effects of G2 harsh fathering. Even though G1 harsh mothering and G1 positive fathering were associated with more behavior problems, and G1 positive mothering was associated with more positive adjustment, there were no significant indirect effects because neither behavior problems nor positive adjustment was linked with G2 young adult harsh fathering. In Figure 2, no bold arrows are drawn from behavior problems or positive adjustment to G2 harsh fathering.

G1 mothering and fathering on G2 positive and harsh fathering: Total effects. Because of the lack of indirect effects and the lack of direct effects of G1 positive or harsh mothering, and the lack of a direct effect of G2 harsh fathering, the total effect of G1 fathering is the same as the direct effect of G1 positive fathering on G2 positive fathering.

TABLE 4
Standardized Coefficients for Effects of Control Variables on Early Parenting by G1 Mothers and Fathers and Number of Family Transitions

Variable	G1 Positive Mothering		G1 Harsh Mothering		G1 Positive Fathering		G1 Number of Transitions	
	β	SE	β	SE	β	SE	β	SE
Maternal education	.10	.07	.13*	.07	.32***	.09	-.14**	.05
Age of mother at first birth	.04	.07	.10	.07	.13	.09	.03	.05
Average maternal weekly work hours	.01	.07	-.07	.07	.30**	.09	.15**	.05
Maternal depression	.02	.07	.20**	.07	-.13	.09	.04	.05
Average number of children in household	-.07	.07	.59***	.07	.34***	.09	-.11*	.05
Average income of spouse (ln)	-.04	.08	-.02	.08	.08	.09	-.23***	.05
Limited in typical childhood activities	.05	.07	-.01	.07	-.09	.08	.12*	.05
African American	-.08	.08	.03	.08	-.40***	.11	.02	.06
Latin American	-.05	.08	-.20**	.08	-.25**	.10	-.03	.06
Full model fit indices								
CFI	.87							
RMSEA	.03(.02 - .04)							

Note. $N = 409$.

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

Correlation between G2 positive fathering and G2 harsh fathering. We found a positive correlation, $r(409) = .24$, $p < .01$, between G2 positive fathering and G2 harsh fathering (shown on the right in Figure 2).

Background Variables and G1 Parenting

Table 4 presents the associations between background controls and the G1 variables of positive mothering, harsh mothering, and positive fathering. No background variables were linked to *positive* mothering by G1 mothers (Table 4, column 1). Even maternal depressive symptoms were not significant predictors of positive mothering. In contrast, greater maternal depression, more maternal education, and rearing a larger number of children were associated with greater *harsh* mothering (column 2). Latin American mothers were less harsh in their discipline practices than European American mothers. Being European American, and having greater maternal education, higher work hours, and a larger number of children were linked to more positive G1 fathering (column 3), and therefore, had indirect effects on G2 fathering. African American and Latin American fathers exhibited less positive fathering than European American fathers.

Turning to transitions (column 4), greater maternal education, more work hours, more children, and greater spousal incomes were associated with fewer family structure transitions. Children who were limited in their typical activities experienced more family transitions.

DISCUSSION

The present study is the first to document not only a total effect of fathering received on young adult fathers' parenting over a generation, but more specifically a direct effect,

an association between G1 positive fathering and G2 positive fathering. Consistent with hypothesis 1, positive father involvement in terms of caring for the children and sharing decision-making when sons were young was associated with warmer and more positive parenting of their young children by these same sons in young adulthood. With mothers in their teens and early twenties in the 1980s, these young men's families were socially and economically disadvantaged relative to the full set of youth born in that period/decade. Even in a high risk sample, young men whose fathers were involved became better fathers to their own children. We did not find a significant negative association between G1 positive fathering and G2 harsh fathering.

None of the direct associations between G1 positive mothering or G1 harsh mothering and either G2 positive fathering or G2 harsh fathering were significant. This finding is consistent with previous literature that did not show associations of positive with harsh parenting across generations. Furthermore, Thornberry and colleagues (1993) did not find a direct association between self-report measures of G1 mothers' positive or harsh parenting and G2 fathers' positive parenting. One other early study found a direct association between the mother's harsh parenting and that of her son (Simons et al., 1991), but this study was marred by shared method variance. In our study, G2 harsh fathering was measured solely by the frequency of spanking. One hypothesis for the lack of association is that spanking was infrequent for these fathers and their young children, and although the best measure of harsh discipline, did not provide a measure of the full range of disciplinary behaviors. It could also be the case that disciplinary practices have changed over the period since these early studies were conducted.

Consistent with hypothesis 2, this study documented that fathering and mothering strongly influence whether sons have behavior problems. Maternal parenting also influences the extent to which they have positive and adaptive characteristics such as persistence and efficacy, and whether the adolescent is linked to a religious community.

In contrast to hypothesis 3, the results did not identify indirect effects of G1 fathering on that of G2 sons through either positive or negative adolescent behavior. The effect of G1 positive fathering on G2 young adult positive fathering was not mediated by behavior problems or positive adjustment during G2's adolescence. Although positive fathering, positive mothering, and non-harsh maternal discipline were associated with sons' reduced behavior problems, and positive mothering was associated with sons' positive adjustment, neither problem behavior nor positive adjustment was associated with later fathering behavior. The results differ from that of Thornberry and colleagues (1993, 2005) and Simons and colleagues (1993), both of whom found some indirect mediation from parenting to G2 young men's fathering through G2's problem behavior. Kerr et al. (2009) found an indirect effect of G1 constructive parenting on that of G2 fathers through G2 positive adjustment, but not through G2 antisocial behavior. Of these studies, only Simons and colleagues (1993) examined fathering in both generations. Our results are consistent with the analyses of Conger and colleagues (2003) and Smith and Farrington (2004), who found primarily direct effects of early parenting experiences on G2 parenting.

The finding that G2 adolescent behavior problems do not necessarily interfere with G2 residential positive fathering is reassuring. Either behavior problems reported by youth were not serious enough to interfere with fathering or they were not long-lasting. Because men who live with their children may be selective of better-adjusted young men, the residential fathers we studied did not have a high level of behavior problems as teens. Future research including nonresidential fathers may find adolescent behavior problems to be more salient as mediators.

It was a surprise not to find an association between adolescents' positive behavior and their later parenting of their own children. Again, however, the measurement of positive behavior was not as advanced at the time the data were collected as it is today (Moore & Lippman, 2005). The association of positive adjustment in adolescence with positive fathering in young adulthood was large, although not statistically significant. We were limited by the existing measures.

Family structure transitions were strongly associated with G1 mother's parenting and G1 father's parenting of G2, supporting hypothesis 4. Thus, more frequent family transitions have important indirect effects. They are associated with less positive fathering of G2, and subsequently, with less positive fathering of G3 by G2.

The association between G2 behavior problems and G2 positive adjustment was in the expected, negative direction; however, because it was not statistically significant, hypothesis 5 was not supported.

Finally, we found a positive association between G2 positive fathering and G2 harsh fathering. Both warmth and discipline are considered essential to good parenting. Recent research suggests that conservative religious groups promote both warm involvement and strict control over their behavior (Wilcox, 2004). Thus, it is not surprising to find that involved fathers demonstrate both greater affection and greater discipline.

These findings should not be taken to mean that fathering matters more than mothering; the types of behaviors that comprise mothering and fathering clearly differ, and the amount of time mothers and fathers devote to children differs dramatically (Bryant & Zick, 1996); therefore, the contributions of the two parents can be expected to differ.

Limitations and Strengths

The major limitation of this study is that the measurement of *fathering* by the G1, as in most other intergenerational studies, was not as detailed as that of *mothering* at the time the data were collected. Although the NLSY did not directly ask questions of G1 fathers during the childhoods of these young men, there is no reason to expect maternal reports of whether the father provided child care to be biased (Hernandez & Coley, 2007). The other measure of G1 fathering, participating in decisions about his child, was reported by the young man as an adolescent, substantially prior to becoming a father. Common method variance is possible due to temperament, but because of the substantial developmental difference, less likely to bias his later responses about fathering as an adult. Current measurement of G2 harsh fathering was also limited, partly due to the young age of the children. Adolescent behavior was well measured, including reports from interviewers as well as the youth themselves.

A second limitation is that we did not include the temperament of the G3 child in the present study; temperament may be both a result of the intergenerational transmission of temperamental characteristics and a causal factor in fathers' behavior (Kerr et al., 2009). We did not have such information for G3 children.

Young men in the NLSY are transitioning to adulthood, including fatherhood. The fact that the young fathers included in the present study were more disadvantaged than the remainder of young men is an important strength of the study and makes it more comparable to previous studies. Disadvantaged young men have been shown to have a higher likelihood of having children early, and therefore are included in our sample of fathers; however, they are also more likely not to live with the child. Young men

who become residential fathers may be selective of youth with fewer behavior problems and with more positive adjustment. The failure to identify mediating mechanisms may result from less variability in the mediating variables in our sample.

Given the large proportion of men parenting children in other households today (Hernandez & Brandon, 2002), understanding the transmission of fathering across generations for all young men is important. The fact that the study was limited to only residential fathers among G2 youth is a limitation shared with all other intergenerational parenting studies. We were able to control for factors associated with residential versus nonresidential fatherhood (such as race/ethnicity, income, and number of family structure transitions), minimizing selectivity. Our study is likely to underestimate the strength of the intergenerational linkage; men who are nonresidential are likely to have had less positive father experiences, and are likely to have more behavior problems and less positive adjustment as adolescents.

However, this limitation is offset by the following strengths: These data were collected over more than a 20-year period, the reporter was not the same over time, and the G2 young man reported his own parenting involvement. In addition, sample sizes are comparable or larger than similar studies published in the literature, and the sample is diverse and nationally representative.

IMPLICATIONS FOR PRACTICE, APPLICATION, AND POLICY

This research suggests that the proportion of future generations of men who are good fathers to their own children is likely to increase if current fathers' positive engagement with their children continues to grow. A young man's positive engagement with his father contributes to the former's successful transition to adulthood, and in turn, to greater involvement with his own children. Demonstrating that such engagement can make a difference to their grandchildren, this research provides a strong case for the potential long-term effectiveness of programs and policies aimed at increasing father involvement. Such programs and policies must include nonresidential fathers as well as residential fathers, because substantial proportions of men grow up in unstable families and are unlikely to live with their children. Study results contribute to a fuller understanding of the ways in which fathers contribute to their children's lives. To more accurately predict trends in fathering, future research on the intergenerational transmission of parenting behavior should include nonresidential fathers.

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