Patterns of Father Involvement in Teenage-Mother Families:  
Predictors and Links to Mothers’ Psychological Adjustment

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Abstract

We examine longitudinal patterns of involvement of young, unmarried biological fathers (n = 77) in teenage-mother families using cluster analytic techniques that incorporate multiple dimensions of financial, emotional, and instrumental involvement. Approximately one-third of fathers maintained high levels of involvement over time, another third demonstrated a low level at both time points, and the final third started out highly involved at wave 1 but decreased to low levels of involvement by wave 2. Multinomial logistic analyses suggest that mothers’ positive relationships with both the father and his family predict a greater likelihood of initiated and sustained high father involvement. In contrast, stronger support from the maternal grandmother is related to decreasing father involvement over time, and coresidence with the grandmother is related to sustained low father involvement. While a decreasing pattern of father involvement was significantly associated with increased maternal parenting stress over time, the patterns of father involvement were unrelated to changes in young mothers’ levels of depressive symptoms and mastery.

Key Words: father involvement, psychological adjustment, mother-father relationships, poverty, teenage mothers.
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Introduction

The involvement of fathers with their children—in financial, emotional, and instrumental realms—is a topic of growing concern among policy makers and the public. As the link between father absence and poverty has become clearer, this concern has been targeted particularly at unmarried, nonresident fathers and low-income families. The welfare reform bill of 1996 (the Personal Responsibility and Work Opportunity Reconciliation Act, PRWORA), made this concern explicit, including in the primary provisions demands that mothers in the welfare system comply with paternity establishment and child support enforcement efforts, and that states increase efforts to encourage marriage among low-income parents. These policy levers are intended to increase the financial and possibly emotional connection of poor fathers and their children.

However, experts in the field concur that the knowledge base is slim concerning why unmarried fathers become or remain involved in their children’s lives and how father involvement influences young mothers’ well-being. Extant research suggests that fathers’ skills and access to resources increase the likelihood and consistency of paternal involvement. This work also suggests that family relationships and dynamics—between mothers and fathers, as well as their extended families—are central processes through which young unmarried parents negotiate their new family roles. Here we focus on numerous aspects of the family contexts of unmarried teenage mothers and fathers in predicting fathers’ patterns of involvement over time with their young children.
Defining Father Involvement

Prior to reviewing research on family relationships, we focus on the construct of father involvement among unmarried father and teenage mother families. Research and theory on father involvement has pointed to the centrality of a multi-component conception of parenting which incorporates financial, instrumental, and emotional aspects of paternal involvement (Amato, 1998; Coley, 2001; Doherty, Kouneski, & Erickson, 1996; Lamb, 1997). Research shows that nonresidental fathers tend to bundle their parenting support: fathers who provide financially for their nonresidential child are also likely to visit, engage in caretaking activities, and take responsibility for parenting decisions (Coley & Chase-Lansdale, 1999; Greene & Moore, 2000). These central aspects of father involvement also cut across demographic and cultural boundaries and focus on the central needs of children. Financial, instrumental, and emotional support all are necessary to provide for the myriad needs of young children for basic provisions, care, and love.

Patterns of Father Involvement Among Young Unmarried Families

Within the population of teenage mother families, the prevalence of nonmarital births and nonresidential fatherhood continue to rise. Approximately 4 out of 5 babies born to teen mothers are born outside of marriage (Ventura, Martin, Curtin, Mathews & Park, 2000), and also typically outside of cohabiting unions. Yet, within the large group of nonresidential fathers, substantial variability is apparent in paternal involvement. National data from the last decade indicate that less than one fifth of unmarried fathers pay child support to teenage mothers through the formal child support system (Congressional Budget Office, 1990). On the other hand, research indicates that a significant amount of financial support comes in the form of unreported, irregular, and in-kind contributions, such as diapers and food (Edin & Lein, 1997;
Young fathers also show varying levels of involvement with emotional and instrumental aspects of parenting, and there is some indication that such involvement shows substantial instability over time. For example, in a retrospective study of patterns of father involvement within low-income, African American families, Coley and Chase-Lansdale (1999) found that 30% of fathers retained a high level of involvement and 29% showed consistent low involvement between their child’s birth and preschool years, whereas 18% of the fathers showed substantial increases and 23% substantial decreases in their level of paternal involvement.

**Correlates of Father Involvement: Socioeconomic Risk**

In seeking to understand predictors of father involvement, many researchers have focused on the human and financial capital of fathers, with consistent findings indicating a strong link between a lack of education and employment stability and lower levels of paternal involvement (Coley & Chase-Lansdale, 1999; Cooksey & Craig, 1998; Landale & Oropesa, 2001; Rangarajan & Gleason, 1998). However, less research has addressed the role of maternal characteristics and the general socioeconomic environment of the family. The majority of teenage mothers are poor, and many are also disconnected from the educational system, dropping out of school prior to or following the birth of their child (Maynard, 1997; Coley & Chase-Lansdale, 1998). Relatedly, many young mothers enter the welfare system, often for extended stays (Maynard, 1997), and experience significant financial hardship. The men who father children with teenage mothers also tend to be young, and have high rates of poverty, low educational attainment, and poor long-term economic outcomes (Lerman, 1993; McLanahan, Garfinkel & Mincy, 2001). Hence, broad
socioeconomic risk is a reality for the majority of young unmarried parents, providing a larger context in which to embed an understanding of paternal involvement.

*Family Relations and Father Involvement*

Given the diversity and instability of paternal involvement among young, unmarried fathers, a central question concerns what factors predict patterns of father involvement over time. Family systems theory suggests that the father-child relationship must be understood within the context of the other relational subsystems and the broader system of the family (Cox & Paley, 1997). The relationship between the mother and father appears to be centrally important in supporting or discouraging consistent paternal involvement. Studies find that fathers tend to be uninvolved in the face of unstable or hostile mother-father relationships (Coley & Chase-Lansdale, 1999; Cutrona, Hessling, Bacon, & Russell, 1998; Rhein et al., 1997). When parents have a poor relationship, mothers may block fathers’ access to children, or negativity in the parental relationship may spill over into fathers’ feelings about their child. In addition, a lack of closeness between parents may influence mothers’ views of paternal involvement (Coley & Morris, 2002; Krishnakumar & Black, 2003). In contrast, closeness and cooperation in the parental relationship are likely to enhance the level, consistency, and efficacy of fathers’ parenting efforts. Research has found cohabitation or a continuing romantic involvement to be central correlates of paternal involvement among unmarried fathers (Johnson, 2001). An equally important question is whether the quality of the parental relationship, whether or not embedded within a romantic engagement, supports sustained father involvement over time.

The mother’s relationship with the father’s family, particularly his mother, may also be an important component of the family system that supports sustained father involvement. For
example, Anderson’s (1993) ethnographic research with young poor parents found that the paternal grandmother’s acceptance of his paternity and feelings toward the child’s mother played a significant role in pushing young fathers toward accepting their paternal role and responsibility. In addition to influencing father’s behaviors, the mother’s relationship with the father’s family may also increase access to the fathers’ broader social network and provide a direct source of parenting support (Anderson, 1993; Greene & Moore, 2000; Kaplan, 1997).

Finally, research has indicated that maternal grandmothers often play a central role in teenage mother families. Many young mothers reside with their own mothers, and the presence of a potential co-parent might decrease a mother’s desire or need for support from the father. Hence, the presence or involvement of grandmothers may provide a gatekeeping role against sustained father involvement (Danziger & Radin, 1990; Rhein, et al., 1997). On the other hand, grandmothers may also help to support father involvement. In recent research with young African American mothers who resided with their own mothers, Krishnakumar & Black (2003) found that positive relationships between maternal grandmothers and biological fathers were related in an indirect manner to mothers’ satisfaction with fathers’ involvement over time.

Father Involvement and Young Mothers’ Psychological Adjustment

In addition to identifying the predictors of young fathers’ patterns of involvement over time, the present paper aims to understand how father involvement relates to young mothers’ psychological adjustment. Psychological adjustment is important to study not only as an important indicator of young mothers’ well-being, but also because lower levels of psychological adjustment are correlated with rapid repeat pregnancy (Gillmore, Lewis, Lohr, Spencer, & White, 1997) and can diminish mothers’ success in school or in the labor market (Danziger et al.,
Psychological distress can also diminish mothers’ effective parenting and interfere with children’s healthy development (Holden, Willis, & Foltz, 1989). Due to a combination of developmental, economic, and social factors, women who first give birth during adolescence are at greater risk for depression and parenting stress than women who postpone childbearing (Cohler & Musick, 1996). For example, recent US estimates find that approximately 30% of white and over 40% of black teenage mothers are depressed (Deal & Holt, 1998), in comparison to a prevalence rate of about 13% in the general female population (Kessler, 1998).

In general, prior research has suggested that social support from others is related to positive mental health. In the teenage parent literature, male partner support has been associated with lower levels of psychological distress and higher levels of well-being, including life satisfaction, self-esteem, and positive parenting, although problems in the relationship are also not uncommon (Gee & Rhodes, 1999). This literature has not thoroughly examined how longitudinal patterns of father involvement relate to longitudinal patterns of psychological adjustment. In particular, it is not clear whether a sustained low level of involvement over time is more or less detrimental to young mothers’ adjustment than is the experience of having fathers drop out of an initial pattern of involved parenthood.

**Research Questions**

In the current study, we seek to expand past research on predictors of father involvement among unmarried, low-income teenage-mother families. Although evidence that speaks to this question is growing, much of the research has relied on one wave of data with correlational relationships or comparisons of different cohorts across time and has often neglected to examine the role of family relationships within a systems framework. The present study relies on
longitudinal data on father involvement and family characteristics and includes numerous assessments of the quality of relationships among family members. In particular, two sets of analyses seek to (1) explore the individual and family relationship predictors of patterns of father involvement over a one year period, and (2) assess how patterns of father involvement predict concomitant patterns of change over time in multiple dimensions of young mothers’ psychological adjustment.

Method

Sample

Data for this investigation are drawn from a longitudinal study developed to examine the well-being of low-income teenage mothers in multiple realms. The participants in this study resided in one mid-size county in a Midwestern state. In the central urban core of this county, in which most of the participants resided, the poverty rate for White youth between the ages of 6 and 17 is 14%; the corresponding figure for African American youth is 52%. The teenage childbearing rate is the 6th highest among all 86 counties in the state. In recent years, approximately 14% of White births and 30% of Black births in the county were to girls 18 and under.

To generate a sampling frame for the present study, an exhaustive list of names of potential participants was solicited from state welfare and social service agencies that served a moderate-size, primarily urban area in the county. The sampling frame represented unmarried minor mothers who were receiving Medicaid or Temporary Assistance for Needy Families (formerly called Aid to Families with Dependent Children) in August 1997 in that county. Out of a list of 112 names and addresses provided, 91 teens were successfully interviewed in the late
fall of 1997, yielding a response rate of 81%. Five percent of the sampling frame refused to participate, and 14% were unlocateable during the interview period. Approximately one year later (winter 1998-1999), respondents were recontacted for participation in a follow-up interview. Eighty-one teens completed a wave 2 interview, representing 89% of the wave 1 sample. The 10 teens not interviewed at wave 2 had moved from their wave 1 residences and were unlocateable after numerous attempts to contact them.

The available sample (N=78) for this study was drawn from those young mothers who participated in both wave 1 and wave 2, whose baby’s biological father was alive at each time point, and who had complete reports of father involvement at both time points. These criteria excluded three of the 81 teens who completed a wave 2 interview. These 78 participants did not differ significantly from the full wave 1 sample on any study variable. Our final analytic sample of mothers is reduced to 77 when patterns of father involvement are created (see below), as one mother is the sole occupant of a category.

Measures

*Dependent variable: father involvement.* Mothers were asked an identical series of questions at waves 1 and 2 to capture numerous aspects of the biological father’s involvement. The questions were grouped conceptually to represent four aspects of father involvement. Questions were drawn from the Baltimore Multigenerational Families Study (see Coley & Chase-Lansdale, 1999) and are based on Lamb’s (Lamb, 1997) tripartite structure of paternal involvement covering the constructs of engagement (caretaking), accessibility (contact), and responsibility (financial support and responsibility). Caretaking and financial support questions lead with “In the past year, how often has child’s biological father done the following?” Fathers’
caretaking was assessed with two questions asking whether the father (a) baby-sat or (b) watched the child overnight (wave 1 Pearson r = .67; wave 2 Pearson r = .89). Financial support was assessed with three items asking whether the father had (a) given her money directly (informally), (b) bought clothes, toys or presents for the child, or (c) purchased groceries or diapers (wave 1, _ = .89; wave 2 _ = .93). No measure of formal support was available in the survey. The caretaking and financial support questions were measured on a 1-3 scale, and the variables represent the mean of responses. Frequency of contact between the father and child was measured with one item assessing how often the child spends time with the father (range 1-5; not at all-daily). Finally, fathers’ responsibility was measured with the average of two items asking the mother how much responsibility the father takes for the child’s upbringing (range 1-4) and how often the father and mother discuss the child (range 1-4) (wave 1 Pearson r = .74; wave 2 Pearson r = .85).

Characterizing father involvement over time. Following Coley and Chase-Lansdale (1999), we use standardized measures of the four indicators of father involvement at wave 1 and wave 2 in cluster analyses to establish the level of father involvement at each time point. We used cluster analytic techniques (agglomerative hierarchical cluster analysis with between group linkage) to gauge group differences in the level of involvement based on all four measures. The cluster analysis results at each wave suggest a two-cluster solution, with fathers tending to be involved at a high or a low level on all four dimensions of involvement. This supports prior research suggesting that fathers bundle their parenting support (Coley & Chase-Lansdale, 1999; Greene & Moore, 2000). At wave 1, 62.8% of the fathers were characterized as highly involved. However, at wave 2, only 33.3% of the fathers were classified as such. We created four groups to represent patterns of father involvement over time: high involvement in both waves (high-
high, n=25), low involvement in both waves (low-low, n=28), high involvement in wave 1 and low involvement at wave 2 (high-low, n=24), and low involvement in wave 1 and high involvement at wave 2 (low-high, n=1). The sole mother in the low-high group was dropped from further analysis, leaving an analytic sample of 77 mothers.

Predictor variables. At the wave 1 interview, mothers reported on a variety of characteristics of and relationships within their families. We include the absolute value of the age difference between the mother and father at the time of the baby’s birth as a control variable. Additionally, a dichotomous control variable for child’s gender (coded 1 if boy, 0 if girl) was included.

Mothers reported on characteristics tapping into the potential availability of financial and emotional support for herself and her child, which we characterize as socioeconomic risk. To preserve degrees of freedom, we assess socioeconomic risk with a summary scale (addition of four dichotomous variables) ranging from 0 to 4. This scale measures economic strain, unemployment, cash assistance receipt, and school drop-out at the time of the baseline survey. First, the young mother’s economic strain was assessed with 10 questions on how satisfied she is with such things as her housing and medical care, and with her ability to buy necessary items for herself and her child. Responses ranged from 1 (very dissatisfied) to 4 (very satisfied). The mothers were characterized as economically strained if their score was below the median (3.1) of the distribution and were given one point if strained and zero otherwise. Second, the mother was given one point on the economic strain scale if she was unemployed at the time of the survey. Third, the mother was given one point if she reported receiving cash welfare assistance at the time of the survey. Finally, the mother was given one point if she had dropped out of school.
Potential availability of financial and emotional support is also measured with the teen mother’s living arrangements (coded 1 if teen living with the maternal grandmother at baseline and 0 otherwise) and grandmother social support. Grandmother social support was measured with responses to three questions asking how often the teens talked to their mother about (1) how things were going with their friends, (2) their plans for the future, and (3) how to raise the baby. Answers were coded on a 1-6 point scale, with higher scores representing greater communication. The measure is based on the mean of the responses to the three items (\(\_ = .79\)).

Mothers also described the status and quality of important family relationships at the baseline interview. The quality of the mother-father relationship was measured with one survey item asking how well the mother got along with the father. The mother-father’s family relationship was measured as the mean of two survey items (Pearson \(r = .77\)) asking how well the mother got along with the father’s family and how involved the family was in helping raise the child. Original survey responses were coded on a 0-4 point Likert scale, with higher numbers representing higher-quality relationships and greater involvement from the father’s family.

*Mother’s Psychological Adjustment*

*Parenting stress.* Mother’s parenting stress is measured in wave 1 and wave 2 with the sum of her responses to six questions on the frequency of her feelings about her role as a mother. Sample statements include “you have too little time to spend by yourself” and “your child is making too many demands on you” (wave 1 \(\_ = .82\); wave 2 \(\_ = .77\)). Original responses were coded on a 1-5 point Likert scale, with higher numbers reflecting greater stress.

*Depressive symptoms.* Mothers’ depressive symptoms are measured at both survey points with the Center for Epidemiologic Studies Depression (CES-D) scale (Radloff, 1977). Respondents were asked to rate how often in the past week they experienced symptoms such as
sadness, lethargy, and feelings of depression (wave 1 = .87; wave 2 = .89). The 20 items in the CES-D were measured on a 0-3 scale and the measure represents the sum of responses. Responses to positive items were reverse-coded so that higher scores on the summary scale represent greater risk of depression. Scores of 16 or more are commonly taken as indicative of depression (Weissman, et al., 1977).

Mastery. Mothers responded to seven individual items from the Pearlin Mastery scale (Pearlin, Lieberman, Menaghan, & Mullan, 1981). Mothers were asked to indicate how much they agree with statements such as “there is really no way I can solve some of the problems that I have” and “I have little control over the things that happen to me” (wave 1 = .60; wave 2 = .69). The mastery questions were measured on a 1-3 scale and the measure represents the sum of responses. Responses to negative items were reverse-coded so that higher scores on the summary scale represent greater mastery.

Results

Sample Description

Forty-four percent of the mothers are White; most of the remainder is African American (46% African American, 6% mixed race, and 3% Indian or Alaskan natives; data not shown). Mother’s average age at the child’s birth was 15.86 and father’s average age was 18.99 years. However, the range of father’s ages is much larger than mother’s, with fathers ranging from 13 years to 36 years of age and mothers ranging from 13 years to 17 years of age at the time of the focal child’s birth (data not shown). Among the young mothers, most (44%) gave birth to the focal child at age 16 (data not shown). At baseline, one third of mothers are employed, primarily
in low-wage service sector jobs, and most are quite economically disadvantaged; 45% are receiving cash welfare assistance at wave 1 and the remainder receives Medicaid assistance.

The first column of Table 1 presents descriptive information on all study variables drawn from the wave 1 mother reports. The three-year age difference between mothers and fathers is consistent with findings of larger national studies (Elo, King, & Furstenberg, 1999; Landry & Forrest, 1995; Lindberg, et al, 1997). The children, 43% of whom are boys, averaged approximately one year of age at the time of the wave 1 interview (data not shown). Children varied in age from 1 month to 48 months at the time of the wave 1 interview. Most (68%) of the focal children were 12 months old or younger at the wave 1 interview; only a small number (9%) were older than two years old at that time (data not shown). Over three-quarters (78%) of the mothers live with their mothers at wave 1. On average the teens exhibit 1.8 of the four socioeconomic risk factors.

The rows in the middle of Table 1 present descriptive information on the mothers’ relationships with the father and with his family. At wave 1, the mother reported that she got along “pretty well” with both the father and his family, on average. Mothers report that they talk to their mother about friends, the future, and the baby several times per month on average.

The rows at the bottom of Table 1 present the means and standard deviations of the three measures of mothers’ psychological adjustment. Mothers on average reported parenting stress levels of about 18, the statistical midpoint of the scale, while mastery scores averaged almost 19, which lies above the statistical midpoint. The depressive symptoms scale indicated that the mothers on average were at risk for depression (a score of 16 or higher; approximately 45% of the mothers met the criterion). There were no statistically significant changes over time in mothers’ depressive symptoms or risk of depression. However, the mothers did experience
significant increases in parenting stress (3-point increase, about _ Wave 2 standard deviation), but also an increase in mastery (1-point increase, about _ Wave 2 standard deviation; analysis not shown). The measures of psychological adjustment are moderately correlated with one another. Mastery and depressive symptoms are the most highly correlated (-.55), mastery and parenting stress have a correlation coefficient of -.45, and parenting stress and depressive symptoms have a correlation coefficient of .35.

The measures of psychological adjustment are moderately correlated with one another. Mastery and depressive symptoms are the most highly correlated (-.55), mastery and parenting stress have a correlation coefficient of -.45, and parenting stress and depressive symptoms have a correlation coefficient of .35.

The next set of columns in Table 1 show means for the demographic and relationship variables for each of the three groups defined by patterns of father involvement. A Multivariate Analysis of Variance (MANOVA) was conducted to assess whether the entire set of means of the independent variables differed across the groups defined by father involvement patterns. The omnibus F-test suggests that the vector of means for the independent variables is different across groups (Wilks’ Lambda = .0594, F-test = 1.96, $p < .004$). Thus, we conducted a series of Oneway Analyses of Variance (ANOVA) tests for the individual variables.

There are several univariate differences in demographic and economic characteristics across the groups defined by father involvement patterns. Specifically, the age difference between the mother and the father is greater for those mothers reported a low-low father compared to high-low fathers. Further, a larger proportion of those mothers who report low-low fathers reside with their own mothers at wave 1 compared to those mothers who report high-high fathers. The majority of significant differences, however, occur among the relationship variables. Mothers who report having fathers who are not involved at both points in time have less positive relationships with both the father and his family at wave 1. Further, those mothers with high-low fathers report greater social support from the maternal grandmothers compared to mothers who report fathers as not involved at both points in time. In this univariate analysis,
mothers did not statistically differ across the three groups on the measures of psychological adjustment.

_Predictors of Father Involvement over Time_

Multinomial logistic regression analyses were used to examine the factors that predict patterns of father involvement over time. We have no strong theoretical basis for assuming that the three categories of father involvement can be ordered in a specific way. One might suggest that the “best” circumstance is to have a continually involved father (high-high category). However, the ranking of the other two groups of fathers is less clear. Continually uninvolved fathers may be “better” than fathers who decrease their involvement over time if the continuity of contact (be it high or low) is most relevant for the well-being of the mother and the child. On the other hand, fathers who decrease involvement over time may be better than continually uninvolved fathers if _any_ form of involvement at _any_ time matters most for mothers and children. There is at present too little guidance from the literature to choose from among these alternative hypotheses. For these reasons, we prefer the multinomial logit model to an ordered logit or probit.

Two multinomial logistic regressions were conducted and are presented in Table 2. All variables were entered simultaneously into the regression equation. The first regression uses the fathers who displayed high levels of involvement at both waves (the high-high group) as the reference group (shown in the first two columns); their attributes are compared to those of both low-low and high-low fathers. The second analysis compares the low-low fathers to the high-low fathers (shown in the last column).
Table 2 presents information on the significance of the variables as well as the coefficients, standard errors and relative risk ratios. The relative risk ratios (RRR) can be interpreted as the effect of a one-unit change in the predictor variable on the probability of being in the dependent variable category under consideration compared to the reference category. A RRR that is less than 1 indicates that there is a decreased likelihood of the dependent variable category over the reference category. The -2 log likelihood scores measure how well the model fits the data, with a smaller score indicating a better fit. The chi-square value is also presented; a small significance level suggests that the null hypothesis that the coefficients on the independent variables are zero can be rejected.

Controlling for the demographic and socioeconomic characteristics (which themselves are not significant), more positive relationships between the mother and father as well as between the mother and the father’s family are associated with a lower likelihood of stable low involvement versus stable high involvement. In contrast, teens’ coresidence with the maternal grandmother at wave 1 is associated at a trend level of significance ($p < .10$) with a higher likelihood of the low-low versus the high-high pattern of father involvement.

The factors that distinguish the high-low from the high-high pattern are perhaps especially interesting as they illustrate the factors that may contribute to fathers “dropping out” of active parenting. These results (presented in the middle columns of Table 2) suggest that teenage mothers who report more supportive relationships with their own mothers at wave 1 are at greater risk of having the initially highly-involved fathers diminish their involvement over time rather than sustain high levels of involvement.

Finally, a number of family relationships are associated with a greater likelihood of having a highly involved father decrease involvement over time, in comparison to a stable low
level of involvement. The univariate findings reported in Table 1 are also evident once the multivariate regression analysis is employed. More positive relationships between the mother and father (at trend level), the mother and the father’s family, and the mother and maternal grandmother are all associated with a higher likelihood of having a high-low versus a low-low pattern of father involvement. Conversely, coresidence with the grandmother and a larger age gap between the mother and father (at trend level) are both associated with a lower likelihood of fathers’ exhibiting a high-low versus a low-low pattern of involvement.

Because meaningful interpretations are difficult to make by examining the parameters from the multinomial logistic regressions alone, we rely on predicted probabilities to illustrate some of the substantive findings. Table 3 presents the predicted probabilities associated with the three father involvement patterns based on grandmother coresidence, social support, mother-father relationships, and mother-fathers’ family relationships. We use the “method of recycled predictions” to vary individual variables of interest across the sample and average the prediction, holding all other characteristics constant. These exercises provide a sense of the magnitude of the findings presented in Table 2. In other words, the numbers in the rows show how the distribution of individuals across the three groups would change if the value of a particular covariate is changed (recall that in the actual distribution (Table 1), approximately one-third of the sample is in each group).

The first set of comparisons (rows 1 and 2 of Table 3) involves varying the grandmother coresidence variable. These results show that living with the maternal grandmother at wave 1 affects the probabilities of having a high-low and also a low-low father, but has no effect on the probability of being in the high-high group. For example, holding all other characteristics constant (at each mother’s true value for that variable), if everyone in the sample lived with a
grandmother at wave 1, 27% would have a high-low father and 41% would have a low-low one. If, however, all of these same girls did not live with their mothers at Wave 1, then fully half would have a high-low father and only 17% would have a low-low one.

The next rows of Table 3 present a similar exercise with the grandmother social support measure. We calculate the predicted probabilities of father involvement patterns under scenarios in which the teen’s original score on grandmother social support is increased or decreased one standard deviation, holding all other variables constant at the mother’s true value. As with the grandmother coresidence variable, this measure has its greatest impact on the likelihood of being in the high-low versus low-low groups. Holding all other characteristics constant, if everyone had high levels of grandmother social support, then 26% would have a high-high father, 47% would have a high-low father, and 28% would have a low-low one. If, however, all of these same girls had low levels of grandmother social support at Wave 1, then 36% would have a high-high father, 18% would have a high-low father and 46% would have a low-low one. Finally, we conduct this exercise varying the scores on the quality of the mother-father relationship and mother-father’s family relationship. As can be seen in the table, these measures have the greatest impact on the likelihood of being in the high-high versus the low-low group.

Father Involvement and Psychological Adjustment

In the final set of analyses we consider associations between patterns of father involvement and trajectories of mothers’ psychological adjustment. Separate lagged OLS regression models were run for each of the three measures of mother psychological adjustment, with results presented in Table 4. The models include the wave 1 measure of psychological adjustment as a predictor; hence the coefficients on the father involvement variables can be
interpreted as the association between patterns of involvement and change over time in mothers’ well-being. In these analyses, we include dichotomous variables for high-low and low-low father involvement patterns, with the high-high pattern of father involvement as the reference group. In addition, analyses control for the demographic and economic characteristics of the teen mother families. Results indicate that patterns of father involvement are predictive of mothers’ trajectories of parenting stress, but not of mothers’ depressive symptoms or mastery. Specifically, the high-low pattern of father involvement is associated with increasing parenting stress over time in comparison to stable patterns of father involvement, either stably high or stably low involvement (with a sizeable effect size of approximately $\frac{1}{2}$ of one standard deviation). In addition, grandmother coresidence at wave 1 is associated with decreasing parenting stress over time, also with a sizeable effect size (.65 standard deviations). None of the variables (aside from the baseline measure) are significantly associated with wave 2 depressive symptoms. In the analysis predicting teenage mothers’ mastery, a higher initial level of socioeconomic risk is associated with declining mastery over time. Conversely, both a greater age gap between the mother and the father as well as wave 1 grandmother coresidence are marginally significantly associated with increasing levels of maternal mastery.

Discussion

The current focus of government policy and programmatic efforts to increase the connection between nonresidential fathers and their children highlights growing concerns over father involvement in unmarried and low-income families. Yet the limited knowledge base concerning factors that support and discourage the involvement of fathers prohibits the
development and enactment of informed, effective programs. Results from this study highlight the central importance of parental and extended family relationships in predicting which fathers fulfill active parenting roles.

This work replicates and extends previous research on predictors of patterns of father involvement, highlighted in particular by two strengths. First, the current study employs reports of fathering behaviors in multiple realms over time rather than a narrow or static view. Second, information on father involvement over two prospective points in time allows the identification of distinct longitudinal patterns of fathering behaviors.

Consistent with prior literature, our cluster analysis revealed two distinct levels of fathering and suggests that fathers tend to “package” their involvement across multiple dimensions. In addition, the longitudinal patterns of involvement indicate a dearth of fathers who showed low levels of involvement when their children were relatively young but high levels of involvement one year later. This suggests that once fathers disconnect from active parenting of their children in numerous realms, it is quite unusual to regain an active parenting role. This finding stands in contrast to a previous analysis of patterns of fathering that used involvement during pregnancy and delivery as the first time point and found that a substantial group of fathers (18% of the sample) moved from low involvement at the time of birth to a high level of involvement when the children were preschool age (Coley & Chase-Lansdale, 1999). Together, these two sets of results, from studies using very similar methodology and both with samples of unmarried, low-income young mothers, suggest that the first year of a child’s life presents a centrally important time for cementing an unmarried fathers’ engagement in parenting. These findings stand apart from some recent suggestions that the time of birth is the key moment in which fathers commit to being involved and active parents or to disengaging (Garfinkel,
McLanahan, Tienda, & Brooks-Gunn, 2001). Rather, our findings suggest that this decision process might occur over the first months of a child’s life, as the young parents adjust to their new roles and relationship.

Moreover, the multivariate analyses considering predictors of patterns of father involvement provide important insights into factors that might support or prohibit active and engaged fathering, pointing particularly to the centrality of parental and family relationships. The level of congeniality and acceptance (how well the parents “got along”) in the mother-father relationship was a significant predictor of patterns of father involvement. Better relationship quality increased the likelihood of a father being highly involved at both measured times relative to a lack of involvement at both times.

The quality of the relationship between the mother and the father’s family also distinguished fathers who were not involved in their child’s life at either wave from those who exhibited high levels of involvement at both waves as well as those who started out with, but did not maintain, high levels of involvement. Kaplan (1997) suggested that the paternal grandmother often plays a role in supporting father involvement, perhaps because her acceptance of the grandchild encourages the father to take part in the child’s life. Conversely, the fathers’ high levels of involvement at wave 1 might provide more opportunities for the mothers to interact with the fathers’ family of origin, and our finding could reflect a positive relationship that derives from the fathers’ engagement and involvement. This interesting finding underscores the importance of considering a wide range of family and kin relationships in studying specific dimensions of parental involvement (Cox & Paley, 1997).

With respect to demographic characteristics, young mothers’ coresidence with their own mothers at wave 1 predicted a greater likelihood of fathers maintaining a low level of
involvement over time in comparison to both of the other groups. This may represent evidence of grandmothers serving as substitutes for fathers in terms of the support they provide to the teenage mother and her child, or acting as “gatekeepers” and somehow limiting or discouraging the father’s involvement. This finding is important because it suggests differences in the initial level of father involvement. Additional information on the nature of the relationship between the child’s grandmother and the child’s biological father would shed light on this finding. However, it does suggest that the coresidence requirement for minor unmarried mothers under PRWORA may be at odds with welfare policy’s concurrent emphasis on father involvement.

The social support received from the teen’s own mother plays an important role in differentiating fathers’ involvement patterns. The nature of the results, however, suggests several different phenomena may be present. On one hand, low levels of grandmother social support were correlated with an increased likelihood of a low-low pattern of father involvement. This does not support a “substitution” story, but rather one that suggests that fathers are more involved, at least initially, when grandmothers also provide social and emotional support to teenage mothers. It is possible that grandmothers’ support of the teenage mother provides a more hospitable environment for the father himself to be involved. However, at the same time, a higher level of grandmother support also increased the likelihood of a high-low pattern of involvement relative to a high-high pattern, albeit to a slightly lesser degree. This finding does support a “substitution” story. In this instance, it is possible that fathers diminish their involvement over time in the presence of active grandmother support, perhaps because of a sense (their own or on the part of other family members’) that their contributions are not critical. A different explanation for this association could be that grandmothers observe characteristics of fathers (unobserved to us) and themselves “predict” which fathers will drop out of active
parenting. In doing so, they may choose to focus their support on their daughters who will, over time, lose the fathers’ support. Together with the findings on the association between grandmother coresidence and father involvement, these findings suggest a multiplicity of types of relationships between teen mothers, grandmothers, and fathers that interact in complex ways to shape patterns of father involvement over time.

Understanding father involvement in young unmarried mother families is also important because paternal engagement may provide a support or a stress for mothers’ psychological adjustment. To this end, we found some evidence to indicate that patterns of father involvement over time may affect teen mothers’ psychological well-being. Specifically, the presence of a father who starts out highly involved but decreases his involvement over time is associated with increasing levels of maternal parenting stress in comparison to stable patterns of father involvement. This increase in parenting stress could be attributed to the inconsistent parental involvement exhibited by the father, or it could be that mothers who experiencing increasingly greater stress as a parent may drive away initially involved fathers. Given the association between parenting stress and young children’s aggression (East & Felice, 1996) this finding requires further attention and study. In either case, it supports other research suggesting that stability in relationships and involvement is critical (Gee & Rhodes, 1999). For instance, in no case did we find that stably low levels of father involvement were predictive of declines in psychological adjustment relative to stably high levels of involvement. It is possible that couples who experience the high-low pattern of father involvement also experience a concomitant set of stressful life events or relationship difficulties that exacerbate the young mothers’ parenting stress.
Limitations

It is important to note some of the limitations of this study. First, we recognize that an important limitation of the analysis is the small sample size and the teenage mothers who participated in this study might not be representative of young mothers in other locales. This is an unfortunate shortcoming and may have limited the power we had to estimate important parameters in the models. However, the unique nature of the sample (very young mothers) helps to compensate for this relatively small sample size. Second, although we were able to identify three distinct patterns of father involvement over time, only one father in the sample demonstrated an increase in paternal involvement over time, thus prohibiting an analysis of this pattern of fathering behavior. As one prominent goal of policy and programmatic efforts is to increase the involvement of fathers who have already disconnected with their children, understanding the experiences of this pattern is a central concern for future research. Third, as in most past research, this study relies on maternal reports of father involvement. This has been a common deficit in the available data on father involvement due to the difficulty of attracting and retaining the participation of representative samples of fathers, particularly low-income, minority, and unmarried fathers (Coley, 2001). Due to this difficulty, the use of mother reports allows access to greater numbers of low-income and unmarried families, yet it is important to be aware of the potential biases of mother report data, particularly regarding men with whom they have conflictual relationships (Coley & Morris, 2002). Finally, the data regrettably lack information on fathers’ education and employment status, and thus the models were not able to address the role of paternal human capital characteristics, found in previous literature to be central predictors of father involvement (Coley & Chase-Lansdale, 1999; Stier & Tienda, 1993; Sullivan, 1993). However, our multi-item index of the teenage mothers’ socioeconomic
characteristics is quite likely significantly correlated with the economic characteristics of the fathers and thus helps to serve as a proxy for the unmeasured father characteristics. At the same time, this study focused on the more proximal influences on fathering behaviors, primarily the relationships and connections among family members. We were not able to address more distal influences such as social policies regarding paternity establishment or child support directed at families receiving TANF benefits. Such policies, in addition to contextual factors like the macroeconomic climate, might also affect parental relationships and fathering behaviors. Although our study adds to the sparse literature examining the importance of emotional relationships between young mothers, fathers, and extended family, future research should seek to extend measurement and analysis of both economic and psychological factors.
References


Author Note

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### Table 1

*Mean Descriptive Characteristics by Involvement Level*

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Mean</th>
<th>SD</th>
<th>High-High</th>
<th>High-Low</th>
<th>Low-Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mother-father age gap (years)</td>
<td>3.26</td>
<td>3.52</td>
<td>3.36&lt;sub&gt;a,b&lt;/sub&gt;</td>
<td>2.00&lt;sub&gt;a&lt;/sub&gt;</td>
<td>4.25&lt;sub&gt;b&lt;/sub&gt;</td>
</tr>
<tr>
<td>Child is a boy (percent)</td>
<td>.43</td>
<td>---</td>
<td>.48&lt;sub&gt;a&lt;/sub&gt;</td>
<td>.33&lt;sub&gt;a&lt;/sub&gt;</td>
<td>.46&lt;sub&gt;a&lt;/sub&gt;</td>
</tr>
<tr>
<td>Socioeconomic risk</td>
<td>1.78</td>
<td>1.02</td>
<td>1.76&lt;sub&gt;a&lt;/sub&gt;</td>
<td>1.67&lt;sub&gt;a&lt;/sub&gt;</td>
<td>1.89&lt;sub&gt;a&lt;/sub&gt;</td>
</tr>
<tr>
<td>Lives with grandmother (percent)</td>
<td>.78</td>
<td>---</td>
<td>.68&lt;sub&gt;a&lt;/sub&gt;</td>
<td>.71&lt;sub&gt;a,b&lt;/sub&gt;</td>
<td>.93&lt;sub&gt;b&lt;/sub&gt;</td>
</tr>
<tr>
<td>Mother-father relationship</td>
<td>2.64</td>
<td>1.43</td>
<td>3.40&lt;sub&gt;a&lt;/sub&gt;</td>
<td>3.13&lt;sub&gt;a&lt;/sub&gt;</td>
<td>1.54&lt;sub&gt;b&lt;/sub&gt;</td>
</tr>
<tr>
<td>Mother-father's family relationship</td>
<td>2.42</td>
<td>1.38</td>
<td>3.22&lt;sub&gt;a&lt;/sub&gt;</td>
<td>2.94&lt;sub&gt;a&lt;/sub&gt;</td>
<td>1.25&lt;sub&gt;b&lt;/sub&gt;</td>
</tr>
<tr>
<td>Grandmother social support</td>
<td>3.62</td>
<td>1.62</td>
<td>3.40&lt;sub&gt;a,b&lt;/sub&gt;</td>
<td>4.26&lt;sub&gt;a&lt;/sub&gt;</td>
<td>3.27&lt;sub&gt;b&lt;/sub&gt;</td>
</tr>
<tr>
<td>Parenting stress</td>
<td>17.70</td>
<td>4.88</td>
<td>17.12&lt;sub&gt;a&lt;/sub&gt;</td>
<td>18.83&lt;sub&gt;a&lt;/sub&gt;</td>
<td>17.22&lt;sub&gt;a&lt;/sub&gt;</td>
</tr>
<tr>
<td>Depressive symptoms</td>
<td>17.25</td>
<td>10.81</td>
<td>16.40&lt;sub&gt;a&lt;/sub&gt;</td>
<td>18.04&lt;sub&gt;a&lt;/sub&gt;</td>
<td>17.32&lt;sub&gt;a&lt;/sub&gt;</td>
</tr>
<tr>
<td>Mastery</td>
<td>18.56</td>
<td>2.34</td>
<td>18.92&lt;sub&gt;a&lt;/sub&gt;</td>
<td>18.54&lt;sub&gt;a&lt;/sub&gt;</td>
<td>18.25&lt;sub&gt;a&lt;/sub&gt;</td>
</tr>
<tr>
<td>Number of cases</td>
<td>77</td>
<td>25</td>
<td>24</td>
<td>28</td>
<td></td>
</tr>
</tbody>
</table>

*Note.* Means having the same subscript are not significantly different at *p* < .05 in the least significant differences (LSD) multiple comparison test. Differences in proportions across groups for the variables boy and lives with grandmother were tested with a chi-square test. All predictor variables are measured at Wave 1. Teen mother psychological outcomes are measured at Wave 2.
Table 2

*Multinomial Logistic Regression Models* (n = 77)

<table>
<thead>
<tr>
<th></th>
<th>Low-Low compared to High-High</th>
<th>High-Low compared to High-High</th>
<th>High-Low compared to Low-Low</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$B$</td>
<td>SE $B$</td>
<td>RRR</td>
</tr>
<tr>
<td>Mother-father age gap (years)</td>
<td>0.09</td>
<td>0.13</td>
<td>1.09</td>
</tr>
<tr>
<td>Child is a boy</td>
<td>0.94</td>
<td>0.95</td>
<td>2.57</td>
</tr>
<tr>
<td>Socioeconomic risk</td>
<td>0.00</td>
<td>0.57</td>
<td>1.00</td>
</tr>
<tr>
<td>Lives with grandmother</td>
<td>2.86</td>
<td>§ 1.63</td>
<td>17.45</td>
</tr>
<tr>
<td>Mother-father relationship</td>
<td>-1.07</td>
<td>* 0.44</td>
<td>0.34</td>
</tr>
<tr>
<td>Mother-father's family relationship</td>
<td>-1.48</td>
<td>** 0.48</td>
<td>0.23</td>
</tr>
<tr>
<td>Grandmother social support</td>
<td>-0.51</td>
<td>0.33</td>
<td>0.60</td>
</tr>
<tr>
<td>Constant</td>
<td>5.07</td>
<td>* 2.58</td>
<td>---</td>
</tr>
</tbody>
</table>

-2 Log Likelihood 48.67

$^{2}$ 71.51 ***

Pseudo R$^2$ 0.42

*Note:* § $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$. Relative risk ratios (RRR) correspond to the risk of the category relative to the risk of the base category (ie. $e^b$).
### Table 3

*Predicted Probabilities for Father Involvement Categories*

<table>
<thead>
<tr>
<th></th>
<th>High-High</th>
<th>High-Low</th>
<th>Low-Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lives with grandmother</td>
<td>.32</td>
<td>.27</td>
<td>.41</td>
</tr>
<tr>
<td>Does not live with grandmother</td>
<td>.32</td>
<td>.51</td>
<td>.17</td>
</tr>
<tr>
<td>Grandmother social support +1SD</td>
<td>.26</td>
<td>.47</td>
<td>.28</td>
</tr>
<tr>
<td>Grandmother social support -1SD</td>
<td>.36</td>
<td>.18</td>
<td>.46</td>
</tr>
<tr>
<td>Mother-father relationship +1SD</td>
<td>.45</td>
<td>.28</td>
<td>.27</td>
</tr>
<tr>
<td>Mother-father relationship -1SD</td>
<td>.21</td>
<td>.32</td>
<td>.47</td>
</tr>
<tr>
<td>Mother-father's family relationship +1SD</td>
<td>.44</td>
<td>.33</td>
<td>.23</td>
</tr>
<tr>
<td>Mother-father's family relationship -1SD</td>
<td>.20</td>
<td>.26</td>
<td>.54</td>
</tr>
<tr>
<td>Number of cases</td>
<td>25</td>
<td>24</td>
<td>28</td>
</tr>
</tbody>
</table>
Table 4

Ordinary Least Squares
Regressions (n =77)

<table>
<thead>
<tr>
<th></th>
<th>Parenting Stress</th>
<th>Depressive Symptoms</th>
<th>Mastery</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( B )</td>
<td>( SE )</td>
<td>( B )</td>
</tr>
<tr>
<td>Mother-father age gap (years)</td>
<td>-.01</td>
<td>.14</td>
<td>-.28</td>
</tr>
<tr>
<td>Child is a boy</td>
<td>1.60</td>
<td>.96</td>
<td>1.53</td>
</tr>
<tr>
<td>Socioeconomic risk</td>
<td>.68</td>
<td>.49</td>
<td>1.70</td>
</tr>
<tr>
<td>Lives with grandmother</td>
<td>-3.19</td>
<td>*</td>
<td>1.21</td>
</tr>
<tr>
<td>Baseline outcome variable</td>
<td>.40</td>
<td>***</td>
<td>.10</td>
</tr>
<tr>
<td>High-low father</td>
<td>2.40</td>
<td>*</td>
<td>1.19</td>
</tr>
<tr>
<td>Low-low father</td>
<td>.00</td>
<td>1.19</td>
<td>-.16</td>
</tr>
<tr>
<td>Constant</td>
<td>11.65</td>
<td>***</td>
<td>2.00</td>
</tr>
<tr>
<td>( F )</td>
<td>5.76</td>
<td>***</td>
<td>2.69</td>
</tr>
</tbody>
</table>

Adjusted \( R^2 \) \( .31 \) \( .13 \) \( .23 \)

Note: § \( p < .10 \). * \( p < .05 \). ** \( p < .01 \). *** \( p < .001 \). For parenting stress the high-low and low-low coefficients differ at \( p < .10 \); this comparison is not significant for depressive symptoms or mastery.