

Fathers' Influence in the Lives of Children With Adolescent Mothers

Kimberly S. Howard, Jennifer E. Burke Lefever, John G. Borkowski, and Thomas L. Whitman
University of Notre Dame

Little is known about the extent, nature, and impact of fathers of children with adolescent mothers. The current study measured father involvement with 134 children of adolescent mothers over the first 10 years of life. Overall, 59% had consistent father contact across the first 8 years. This contact was associated with better socioemotional and academic functioning at 8 and 10 years of age, particularly in school related areas. Children with greater levels of father contact had fewer behavioral problems and had higher scores on reading achievement; these results held after controlling for maternal risk. The findings showed the important role that fathers play in the lives of at-risk children, even if the father does not reside with the child.

Keywords: father contact, adolescent mothers, school achievement, at-risk children

Over the last several decades, research has increasingly focused on the role that fathers play in the lives of children at risk for delayed development, including children who have grown up in single-parent homes. Since 1960, there has been a sixfold increase in births to unmarried mothers. In 1999, 69% of African American births, 42% of Hispanic births, and 22% of European American births occurred outside of the context of marriage (Ventura & Bachrach, 2000). On the basis of current trends, it is likely that more than 85% of African American children will live with a single parent at some point in their lives (Hamer, 1997). The influence of fathers is especially important to consider in the context of adolescent parenting, because the majority of mothers are single parents and many children are raised from infancy with only one parent in the home (Mott, 1990). Greene and Moore (1996) reported that children of adolescent mothers are 50% less likely than their peers to have contact with their fathers.

Research on fatherhood has typically examined residential fathers in two-parent families. There is evidence to suggest that resident fathers are in a better position to have a positive impact on their children's lives and that both children and parents benefit from warm and supportive family relationships in two-parent families (Cummings, Goeke-Morey, & Raymond, 2004). In contrast, there has been little research on how nonresidential fathers influence their children's development (Amato & Gilbreth, 1999).

The purpose of the present study was to describe the pattern of father presence in the lives of an at-risk sample of adolescent mothers and their children over the first 10 years of life and to assess the impact of father involvement on children's development, with a special focus on the protective nature of father involvement. In addition, maternal characteristics that promote father involvement were examined.

The prevailing assumption of researchers and policy makers has been that if a father is absent from the home, he is also absent from the child's life; however, this perspective is changing. Although a father's involvement with his child tends to decline over time if he is not married to the child's mother, many fathers remain involved in their children's lives (Furstenberg & Harris, 1993). For example, Mott (1990) found that the overall contact of many nonresidential fathers with their children is fairly high and stable over time, particularly for fathers with steady jobs who live near their children. Moreover, research indicates that these fathers often positively influence children's development (Amato & Sobolewski, 2004). Halle (1999) found that father availability and involvement is associated with cognitive gains and academic success in school-age children, including higher grades and achievement in math and reading (Biller & Kimpton, 1997). Contact with nonresident fathers has also been shown to be associated with fewer behavioral problems and improved psychological well-being (Menestrel, 1999).

The types of fathering that men engage in tend to be the same regardless of residential status, yet both the frequency and the quality of paternal behaviors may be different for married versus nonresidential fathers. Family disruption has the potential to reduce contact with the father as well as his level of involvement with routine tasks such as child care and help with homework. These activities are important for fathers to display if they hope to encourage emotional and cognitive development (Greene & Moore, 1996; Halle, 1999).

Kimberly S. Howard, Jennifer E. Burke Lefever, John G. Borkowski, and Thomas L. Whitman, Department of Psychology, University of Notre Dame.

This research was supported by National Institutes of Health (NIH) Grant HD-26456. Kimberly S. Howard was a predoctoral trainee on NIH Grant HD-07184.

Correspondence concerning this article should be addressed to Kimberly S. Howard, Department of Psychology, University of Notre Dame, Notre Dame, IN 46556. E-mail: khoward@nd.edu

Father involvement not only has a direct effect on children's socioemotional and cognitive well-being but also serves to moderate the influence that mothers have on their children (Flouri & Buchanan, 2004). This influence is perhaps even stronger for single mothers who are often the only parent readily available to the child. Several studies using the current data set have observed that the three prenatal maternal risk variables—intelligence, personal adjustment, and cognitive readiness to parent—are associated with children's cognitive and socioemotional outcomes. O'Callaghan, Borkowski, Whitman, Maxwell, and Keogh (1999) tested the causal paths between prenatal maternal intelligence, personal adjustment, social support, and cognitive readiness to parent on parenting behaviors and child characteristics at 6 months of age. Cognitive readiness to parent mediated the influence of maternal adjustment and intelligence on observed parenting behaviors and child temperament. Relatedly, Sommer et al. (2000) found that maternal intelligence was the strongest predictor of children's cognitive-linguistic development, whereas maternal personal adjustment was related to the children's personal adjustment. Cognitive readiness to parent was a significant predictor of children's adaptive behaviors. These studies suggest that prenatal maternal intelligence, personal adjustment, and cognitive readiness play important roles in the prediction of early parenting practices and child outcomes (Whitman, Borkowski, Keogh, & Weed, 2001).

When mothers are at risk themselves, they also place their children at risk for experiencing developmental delays and associated problems in school or with peers (Borkowski et al., 2002). In such cases, another adult, particularly the child's father, may provide a buffer against some of the negative influences associated with being raised in a high-risk home. In this sense, contact with the fathers may act as a protective factor in the lives of children with adolescent mothers (Masten, Best, & Garmezy, 1990).

Although relatively little is known about the involvement and impact of nonresidential fathers, even less is known about the characteristics that promote father involvement (Flouri & Buchanan, 2003). Maternal factors may have considerable influence on the quantity of nonresident-father involvement. For example, a father is more likely to be involved with his child if he has a positive relationship with the child's mother (Cummings et al., 2004). It has also been shown that among married couples with children, marital satisfaction is an important predictor of father involvement (Belsky, Rovine, & Fish, 1989). This may be due to the fact that a positive, loving relationship between mother and father provides a more nurturing environment for all members of the family. Research has also shown that sensitive parenting and good marriages are associated with one another (Goldberg & Easterbrooks, 1984) but that conflict between parents is associated with negative developmental outcomes (Cummings, Davies, & Campbell, 2000). This pattern seems to be similar among unmarried parents as well: For unmarried adolescent fathers, interparental conflict is an important predictor of father involvement even after controlling for romantic involvement (Fagan, Barnett, Bernd, & Whiteman, 2003).

Although not previously investigated, specific character-

istics of the mother may also promote father involvement. For example, a teen mother's level of cognitive development may impact not only the quality of her parenting (Whitman et al., 2001) but also how well she relates to the child's father, which, in turn, can have a substantial impact on father involvement. Similarly, factors such as a mother's history of stable relationships with men and the "wantedness" of the child might influence her attitudes toward the father and his relationship with their child. For example, mothers with consistent and positive experiences with their own fathers may expect and encourage more involvement from their children's fathers.

The present study examined the impact of father contact on children's development using a sample of adolescent mothers and their children (Whitman et al., 2001). The study had four aims: (a) to describe the pattern of fathers' contact with their children in families headed by adolescent mothers; (b) to determine the specific child outcomes associated with the involvement of biological fathers; (c) to assess whether fathers buffered the effects of maternal risk on children's development and whether boys benefited more than girls from contact; and (d) to identify maternal characteristics that promoted father involvement.

Although most research on fathers has been in the context of two-parent families, it is assumed that research with fathers in other types of family situations will yield similar results (Greene & Moore, 1996). We hypothesized that both boys and girls who experienced higher levels of father contact would show better academic and social development than children who experienced little or no father contact. It was also expected that father contact would moderate the influence of maternal factors on children's outcomes. Finally, we hypothesized that prenatal maternal characteristics would influence whether a father would remain in his child's life.

Method

Participants

The participants were 134 adolescent mothers and their first-born children who were part of the Notre Dame Adolescent Parenting Project, a longitudinal study of adolescent mothering. Fathers were not recruited in the study. Young expectant mothers were recruited from medical facilities and school programs in South Bend, IN, and Aiken, SC. The teens were interviewed prenatally and the dyads have been followed through the child's 10th year of life. The mean age of mothers at childbirth was 17.1 years ($SD = 1.28$) with a range of 14 to 19 years. At the time of the prenatal interview, only 8% of the mothers were married, but 90% had some contact with their child's father. When the children were 8 years old, 20% of the mothers were married, not necessarily to the child's father, and approximately 59% still had contact with their child's father. Approximately half of the children were male (54%). The sample was 66% African American, 27% European American, and 7% Hispanic American. The adolescent mothers came from predominantly low socioeconomic status homes; approximately 75% of the sample fell into the lower two levels of socioeconomic status as determined by the Hollingshead Two-Factor Index of Social Position (Hollingshead, 1965), which is based on both education level and employment status.

According to maternal report, fathers were on average approximately 2 years older than mothers at the time the child was born (19.0 years, $SD = 2.54$). The fathers were 68% African American, 26% European American, and 6% Hispanic American. When the children were 6 years old, mothers reported that 49% of the fathers had graduated from high school, 9% had obtained further education, and 67% were employed. For mothers who reported having a second child by the time the target child was 6 years old, 34% had the same father.

Design and Procedure

Mothers were interviewed during the third trimester of pregnancy regarding their intelligence, cognitive readiness to parent, socioemotional adjustment, and perceived social support. They were subsequently contacted and brought into the laboratory with their first-born children at 6 months and at 1-, 3-, 5-, 8-, and 10-years postpartum. Telephone interviews were also completed when the children were 18 months old and again when they were 6 years of age. The children's teachers were contacted when the children were 8 and 10 years of age and asked to complete questionnaires concerning the children's classroom performance and behavior. A more complete description of the methods used in the larger study can be found in Whitman et al. (2001). Data are currently being collected from the dyads in which the children are 14 and 18 years of age.

For the present study, demographic and social support information was gathered prenatally, when the children were 6 months old, and when they were 1, 3, 5, 6, and 8 years of age. Information was obtained about types of support received, from whom, and whether or not the child's father provided support (i.e., "Does your baby's father help cover the cost of medical care?"). In addition, each mother was asked about the frequency of contact with the father and whether he was her current partner (i.e., "Is the natural father still in contact with you and your infant?"). Children's academic achievement in reading and math was assessed on the Peabody Individual Achievement Test—Revised (Markwardt, 1989) at ages 8 and 10. Teacher reports of internalizing, externalizing, and other classroom behaviors were also assessed at these time points using the Teacher Report Form (Achenbach, 1991a) and the Conners Teacher Rating Scales (Conners, 1969).

Father Involvement

Information was collected about the amount and type of contact that the biological father had with his child. At each of the assessments, mothers were asked a series of questions about father involvement, such as whether the father had contact with the child and if he helped with the child in any way. Prenatally, mothers were asked whether the child's biological father was her current partner. At 6 months, mothers were asked if the biological father was still in contact with the child. At the 12-month assessment, mothers reported whether the child's biological father lived with them, visited, helped financially, and helped with child care. In addition, at 12 months, mothers reported whether the child's father helped with the baby and also if he helped her with other things not related to the baby. These questions were also asked at 3 and 5 years. Finally, at 8 years, mothers indicated whether the biological fathers provided emotional support, financial support, child care, or any other type of support.

A father-contact variable was formed from the preceding questions to estimate consistency of father contact across the child's first 8 years. First, to create standard data across time from inconsistent questions, a dichotomous variable was created at each time

point. If mothers answered positively to any of the questions related to father involvement at a particular time point, they were given a score of "1," indicating that the father was in contact at that time. These scores were then summed across all time points with a possible 0–5 range. Second, in order to observe the influence of consistent father contact, the children were split into two groups on the basis of the newly created variable: a consistent father-contact group and an infrequent father-contact group. Those fathers in the infrequent contact group were either not present or only present early in the children's lives, whereas those in the consistent contact group showed prolonged involvement over time, both early on as well as at ages 5 and 8.

Maternal Measures

Intelligence. Maternal intelligence was measured prenatally using a short form of the Wechsler scales—either the Wechsler Intelligence Scale for Children—Revised or the Wechsler Adult Intelligence Scale—Revised Vocabulary and Block Design tests were administered depending on the age of the mother (Wechsler, 1974, 1981). An estimated IQ was obtained by summing the subscales. This relatively short measure of intellectual functioning is highly correlated with the full measure (Brooker & Cyr, 1986).

Cognitive readiness. Cognitive readiness was measured by pooling three different measures: Knowledge of Child Development, Parenting Style Questionnaire, and Parenting Attitudes Questionnaire. To derive a total cognitive readiness score, the total score for each measure was standardized and then summed to weigh each measure equally (cf. Lounds, Borkowski, Whitman, Maxwell, & Weed, 2005). Knowledge of Child Development assessed the teen's awareness of child developmental stages and milestones. The Parenting Style Questionnaire evaluated parenting orientation and style (e.g., physical punishment and authoritarianism), whereas the Parenting Attitudes Questionnaire assessed general attitudes and values about children (Whitman et al., 2001).

Adjustment. The Youth Self Report (YSR; Achenbach, 1991b) was administered to the mother prenatally and provided data about internalizing and externalizing problems as well as a total behavioral adjustment score. The YSR yields measures of social competence as well as ratings of behavioral problems. Higher scores indicate more difficulties, with a score of 60 and above falling in the borderline to clinical range for the internalizing, externalizing, and total problems scales (Achenbach & Rescorla, 2001).

Maternal risk. Risk was measured by forming an index of the three maternal variables that were collected prenatally. Mothers were considered high risk if they had high scores on at least two of the three items in the risk index. For intelligence, high risk was defined as below 85 (one standard deviation below the mean). For cognitive readiness, high-risk scores were below the mean of an adult sample of mothers, and for the YSR, high-risk scores were 60 or above.

Child Measures

Academic achievement. The Peabody Individual Achievement Test—Revised (PIAT-R; Markwardt, 1989) was used to measure reading and math achievement when each child was 8 and 10. Scores on the PIAT-R were standardized with a mean of 100 and standard deviation of 15. Split half reliabilities for PIAT-R ranged from .93 to .94 (median = .92) in reading comprehension and .90 to .96 (median = .94) in mathematics (Whitman et al., 2001).

Socioemotional adjustment. Socioemotional adjustment was measured by the children's teachers at 8 and 10 years using the

Teacher Report Form (TRF; Achenbach, 1991a). Subscales were derived from teachers' responses that could be summarized to obtain scores in internalizing behavior, externalizing behavior, and total behavioral problems. The *t* scores were scaled by age and gender of the child; a score between 60 and 63 was considered to be in the borderline range, whereas scores above 63 fell into the clinical range (Achenbach & Rescorla, 2001).

The Connors Teacher Rating Scales (CTRS-39; Connors, 1969), another measure of socioemotional adjustment, were completed by teachers when the children were 8 and 10 years. The CTRS-39 includes scales of hyperactivity, conduct problems, emotionally overindulgent behaviors, anxious-passive behaviors, asocial behaviors, and attention problems. In addition, there is a separate Hyperactivity Index that is distinct from the Hyperactivity scale. Both the CTRS-39 and the Hyperactivity Index show satisfactory reliability (Whitman et al., 2001).

Results

To document the impact of father involvement in this at-risk sample of children, we calculated the rate of father involvement at each time point. Next, a maternal risk index was created, as previously described, to combine a number of maternal characteristics, including prenatal intelligence, adjustment, and cognitive readiness, into a single factor. Mothers were then separated into low-risk (51%) and high-risk (49%) subgroups, such that mothers with low risk were defined as those who had zero or one risk factor, whereas high-risk mothers had two or three risk factors. Next, a series of 2×2 analyses of variance (ANOVAs) were used to determine whether father contact and maternal risk predicted child outcomes in social and academic domains, both individually and in combination. Finally, logistic regressions were used to predict classifications of father contact using maternal prenatal characteristics.

Father Involvement

At 1 year of age, 81% of children were in contact with their biological fathers, whereas only 59% were in contact at age 8. It should be noted that all children who had contact at age 8 experienced relatively consistent father contact across the first 8 years; the remaining 41% had either no contact or limited contact with their biological fathers. When the children were 1 year of age, 21.5% of fathers lived in the home, 60.8% provided financial support, and 60.5% visited periodically. By the time the children were 8, the number of fathers living in the home decreased to 11%, the number providing financial support decreased to 28.2%, and the number who visited dropped to 24.5%. There was little change in father involvement between 8 and 10 years, with 9.8% of children living with their fathers at 10, and 27.2% visiting with their fathers. The number of fathers providing financial support increased slightly to 38.3%. Pearson chi-square analyses revealed that sons and daughters did not differ across levels of father involvement. In addition, there was no relationship between father involvement and mothers' ethnicity.

Impact of Father Involvement and Maternal Risk on Children's Development

Father contact and children's socioemotional development. The effects of father involvement and maternal risk on children's developmental outcomes in academic and social domains were explored using a 2×2 ANOVA involving both father contact and maternal risk. Table 1 contains data for academic and socioemotional outcomes at ages 8 and 10 as a function of father involvement. At 8 years, reports on the TRF indicated reliable differences between children who had father contact from those who did not. Specifically, there was a significant main effect for father contact on externalizing behaviors, $F(1, 92) = 11.98$, $p < .01$, with children who had low father contact showing more externalizing problems than children with higher father contact. The relationship between father contact and externalization remained significant even after controlling for maternal YSR total problems scores, $F(1, 86) = 12.10$, $p < .01$. There were no statistically significant effects of maternal risk on externalizing behaviors.

A one-way ANOVA used to test the differences among four groups of children (those with father contact and low-risk mothers, those with father contact and high-risk mothers, those with limited father contact and low-risk mothers, and those with limited father contact and high-risk mothers) was significant, $F(3, 92) = 5.71$, $p < .01$. Further analyses revealed that children who lacked father contact and had high-risk mothers displayed significantly more externalizing problems than either those children who had father contact and low-risk mothers ($p < .01$) or those who had father contact and high-risk mothers ($p < .01$). It is interesting to note the percentages of children in each group who had externalizing scores in the borderline or clinical range. For children with limited father contact, 51.2% had externalizing scores in the borderline and clinical range, and 51.2% of children with high-risk mothers also had elevated externalizing scores (about 16% would be expected in the population). Furthermore, 64% of children with high-risk mothers and limited father contact had externalizing scores in the borderline and clinical range versus 31.3% with low-risk mothers and limited father contact. Finally, 34.8% of children with high-risk mothers and father contact and 36.4% of children with low-risk mothers and limited father contact also had externalizing scores in the borderline or clinical range.

Figure 1a illustrates the effect of father contact on children's internalizing behaviors as a function of maternal risk. Although neither father contact nor maternal risk showed significant main effects, the interaction effect was significant, $F(1, 92) = 3.89$, $p < .05$, suggesting that the effect of father contact on children's internalizing behaviors was different depending on the risk status of the mother. For children who had high-risk mothers, those with father contact had lower levels of internalizing behaviors than those who had limited father contact. In contrast, for children with low-risk mothers, father contact was not associated with internalizing behaviors. It is important to note that 36.8% of children in the high-risk mother, limited father contact

Table 1
Main Effects of Father Contact on Children's Outcomes at 8 and 10 Years

Scale and subscale	Father contact		No contact	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Teacher Report Form (8 years)				
Externalizing <i>t</i> score*	53.90	9.57	60.41	10.05
Internalizing <i>t</i> score	51.44	10.12	52.10	11.46
PIAT-R standard scores (8 years)				
Total math	88.27	17.10	83.56	17.76
Total reading	89.25	17.80	85.56	17.08
Conners Teacher Rating Scale <i>t</i> scores (8 years)				
Hyperactivity**	50.70	10.13	57.43	11.63
Conduct Problems**	53.22	12.75	61.30	15.92
Teacher Report Form (10 years)				
Externalizing <i>t</i> score	54.55	9.02	58.13	12.03
Internalizing <i>t</i> score	52.85	10.88	51.55	9.60
PIAT-R standard scores (10 years)				
Total math	90.29	16.49	86.14	18.11
Total reading**	92.02	20.40	84.56	17.49
Conners Teacher Rating Scale <i>t</i> scores (10 years)				
Demanding of Teacher's Attention**	0.46	0.85	1.00	0.96
Excitable and Impulsive**	0.34	0.64	0.83	0.85
Disturbs other Children*	0.54	0.61	1.17	1.07
Defiant	0.46	0.70	0.75	0.89
Fearful	0.17	0.38	0.28	0.45
Quarrelsome**	0.49	0.70	1.03	1.05
Destructive*	0.03	0.17	0.31	0.60

Note. PIAT-R = Peabody Individual Achievement Test—Revised.

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

group were in the borderline and clinical range for internalizing, whereas only 16% would be expected in the population. In contrast, only 24.1% of children with father contact and low-risk mothers demonstrated elevated levels of internalizing behaviors at 8 years.

Father contact and academic achievement. In terms of academic achievement, father contact did not predict math or reading scores at age 8. However, there were main effects of maternal risk for both math, $F(1, 111) = 6.28, p < .05$, and reading, $F(1, 111) = 5.35, p < .05$. At 10 years, maternal risk continued to predict reading scores, $F(1, 107) = 8.4, p < .01$, and father contact also significantly predicted reading scores, $F(1, 93) = 3.86, p < .05$, such that children with more father contact had higher reading scores than children with little or no contact. It should be noted that higher reading scores were associated with lower maternal risk and more father contact (e.g., only 33.3% of these children scored below 85); in contrast, 68.2% of children with high maternal risk and limited father contact had reading scores that were more than one standard deviation below the population mean (less than 85).

Figure 1b presents reading achievement for boys and girls at age 10 across levels of father contact; an almost identical interaction was found for math achievement. Father contact significantly interacted with children's gender for both math, $F(1, 107) = 7.28, p < .01$, and reading, $F(1, 107) = 4.12, p < .05$. Post hoc analyses revealed that father contact was associated with better math ($p < .05$) and reading ($p < .05$) only for boys.

Father contact and classroom behavior. Children's classroom behaviors were rated by their teachers at 8 and 10

years of age using the CTRS-39. A series of 2×2 ANOVAs were completed to explore the relationship of father involvement, maternal risk, and children's classroom behavior. At 8 years, only overall scale scores were tested, whereas at 10 years, individual items pertaining to classroom behavior were examined. At age 8, children with low father contact were judged to have higher levels of hyperactivity, $F(1, 93) = 9.32, p < .01$, and more intense conduct problems, $F(1, 93) = 7.58, p < .01$, than children who had contact with their fathers. There were no main effects for maternal risk for either of these behaviors. Similar to the pattern that was seen for externalizing behaviors, children who had both high-risk mothers and low father contact displayed the highest levels of hyperactivity, whereas children with father contact displayed significantly lower levels of hyperactivity, regardless of whether they had high-risk or low-risk mothers. Father contact seemed to provide protection from the negative effects associated with having a high-risk mother.

At 10 years, children with greater father contact continued to show better socioemotional adjustment in academic contexts. A series of 2×2 ANOVAs revealed a significant main effect of father contact using item scores on the CTRS-39, such that children with limited father contact were more excitable and impulsive, $F(1, 63) = 6.23, p < .05$, and more likely to disturb other children in class, $F(1, 63) = 7.99, p < .05$. They were also more quarrelsome, $F(1, 63) = 5.67, p < .05$, and destructive, $F(1, 63) = 6.68, p < .05$, than children who had higher levels of father contact. In addition, children with father contact were less likely to make excessive demands of their teachers' attention, $F(1,$

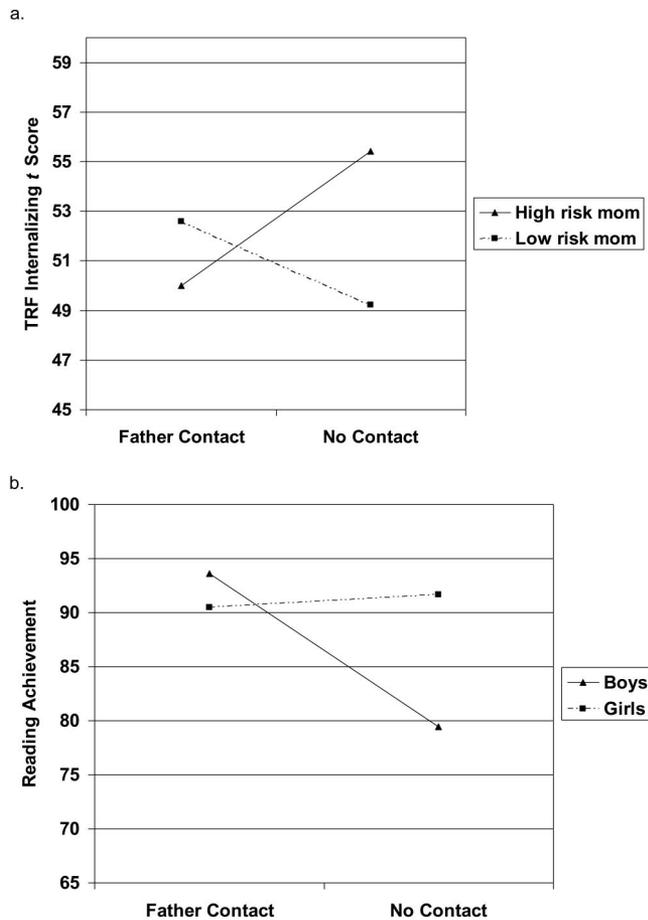


Figure 1. a: Interaction between father contact and maternal risk on children's internalizing scores at age 8. b: Interaction of father contact and children's gender on Peabody Individual Achievement Test—Revised reading achievement scores at age 10. TRF = Teacher Report Form.

62) = 4.59, $p < .05$, and were more cooperative in class, $F(1, 63) = 3.77$, $p = .05$, than children who had lower levels of contact.

Among the socioemotional outcomes at age 10, only three significant main effects were associated with maternal risk: Children with high-risk mothers were more likely to make excessive demands of their teachers, $F(1, 62) = 5.17$, $p = .05$, were less cooperative, $F(1, 63) = 5.54$, $p = .05$, and were more excitable and impulsive, $F(1, 63) = 6.48$, $p = .05$, than were children with low-risk mothers. No statistically significant interactions were found for 10-year outcomes.

Maternal Predictors of Father Involvement

Logistic regression analyses were used to determine whether prenatal maternal characteristics—including consideration of adoption, relationship with the maternal grandfather, and age at childbirth—predicted father contact. Twenty eight percent of mothers reported at least some

consideration of adoption, and 26% reported that they had no prenatal contact with their biological fathers. Children whose mothers considered adoption were less likely to have father contact than children whose mothers did not consider adoption, $\beta = 6.08$, $p < .05$. Mother–grandfather contact also predicted father contact in children's lives: Mothers who experienced contact with their own fathers were more likely to have father contact in their children's lives than those who did not have contact with the children's grandfathers, $\beta = 7.12$, $p < .01$. Maternal age at the time of childbirth was not a significant predictor of father contact.

Discussion

Increased awareness about the importance of fathers for children's development has stimulated new questions about the presence and impact of fathers in families in which they are typically thought to be absent (Menestrel, 1999; Tamis-LeMonda & Cabrera, 2002). The present study confirmed what has been found in recent analyses: The majority of fathers of children of teenage mothers are older than the mothers and generally do not form lasting partnerships with them (Elo, King, & Furstenberg, 1999). Despite this generally negative picture of the stability of families headed by teenage and other at-risk mothers, approximately 59% of fathers in the present sample maintained some form of contact with their children over the first 8 years of life. These data are consistent with recent evidence from Early Head Start, suggesting that nearly 82% of biological fathers have had recent, but generally limited, contact with their 2-year-old children (Early Head Start Father Studies Working Group, 2004). Rates of early father contact in our project were also similar to reports of father contact in a study of unmarried adult parents: One-year follow-up data from the Oakland, CA, site of the Fragile Families and Child Well-Being project indicated that 88% of children had at least weekly contact with their fathers, and 54% lived with them (McLanahan, Garfinkel, Carlson, & Waller, 2002).

Although the fathers of children of adolescent mothers are sometimes assumed to be irrelevant for children's development, the present study demonstrated that father involvement makes a meaningful difference in children's lives, at least through early childhood. The strongest influence of fathers was on behaviors related to school success, such as less defiance and greater cooperation with teachers. Our results are also consistent with the extant literature on typically developing children, which has shown that those who had more consistent contact with their biological fathers throughout their lives had fewer behavioral problems at school (Jackson, 1999) and higher academic achievement, especially in reading (Nord, Brimhall, & West, 1998). However, it has until now been unclear whether these patterns would hold for high-risk families in which the majority of fathers do not reside with their children, though they are sometimes present in their lives. Relatedly, most fathers in the present study did not reside with their families, and many of them had never lived with their children. Nevertheless, children in our sample who had higher levels of

contact with their fathers, either through financial support, periodic visits, or child care, had more positive behavioral and academic outcomes at ages 8 and 10 than children who did not have father contact. These findings point to the impact of nonresident fathers on children's development (Tamis-LeMonda & Cabrera, 2002).

At-risk fathers seem to fill stabilizing roles in children's lives, protecting them from experiencing the negative influence of other contextual risks in their lives, such as violence and the presence of negative role models among peers and family members. A study by Flouri and Buchanan (2001) found that nonresident father involvement protected young children from psychological maladjustment during adolescence and that continued father involvement through adolescence protected against psychological distress during adulthood. Similarly, we found that children of adolescent mothers who had consistent contact with their fathers over the first 8 years of life had fewer behavioral problems (e.g., less aggression) and also had higher levels of academic achievement. These children were also less likely to engage in problematic acting out behaviors, which were reflected in better scores on teacher's ratings of their classroom behaviors. They tended to be less demanding of their teacher for attention, less defiant and uncooperative, and engaged in more prosocial behaviors than children who did not have regular contact with their fathers. In addition, children who had contact with their fathers also had higher levels of reading achievement than their peers who lacked father contact. In short, even in high-risk families, fathers augmented children's development in socioemotional and academic domains in ways similar to fathers in two-parent families (Biller & Kimpton, 1997; Jackson, 1999; Nord et al., 1998).

In addition to the main effect of father contact on children's reading achievement at age 10, there was also an interaction of father contact and child's gender on both math and reading achievement such that father contact was beneficial for sons and had a more neutral effect for daughters. Similar interactions were not found for other major outcome variables. The extant literature provides mixed results concerning fathers' influence on sons versus daughters. Some studies have reported differences in the importance of father involvement depending on the gender of the child in social (Leticq & Koblinsky, 2003) and academic domains (Deslandes & Cloutier, 2000), but the overall results remain unclear concerning whether boys or girls benefit to a greater degree because of their fathers' involvement in their lives. However, there are several studies that find no differences on the basis of children's gender (Dubowitz et al., 2001; Konold, Walthall, & Pianta, 2004).

Father contact can also be viewed as a protective factor in children's lives, buffering them from a range of negative life outcomes. For children born into at-risk families by virtue of having an adolescent mother, this source of protection may be particularly important (Cummings et al., 2000). Flouri and Buchanan (2001) found that the impact of father involvement on later mental health did not vary with the level of mother involvement. That is, even for children who had involved and responsive mothers, father presence pro-

ected in additional ways against later psychological problems. In the present study, father contact served as an important source of protection for at-risk children in terms of behavioral adjustment and reading achievement, even after controlling for maternal variables such as aggression and intelligence.

In addition to predicting children's outcomes on the basis of paternal contact, it is also important to understand the factors that predicted father involvement. For instance, mothers who gave greater consideration to adoption were less likely to have fathers involved in their children's lives. The role of the baby's father in helping the mother to consider adoption versus parenting is not well understood. What is known is that for most mothers who choose adoption, their children's fathers do not help make that decision (Chippindale-Bakker & Foster, 1996). It is possible that one of the reasons a woman considers adoption is an awareness that the father does not plan to provide assistance in raising the child.

The majority of African American teen mothers do not reside with their own fathers and tend to regard their fathers more negatively than do teens without children (Chadiha & Danziger, 1995). Similarly, in the present study, maternal relationships with their own fathers predicted paternal involvement—those mothers who had good relationships with their own fathers were more likely to have father contact in their children's lives. Social learning theory suggests that because many adolescent mothers are raised in families in which their fathers are absent from the home (Ellis et al., 2003), it is not surprising that they have learned from their own life experiences that a man is not necessary to raise a child and can at times be a negative influence, especially if involved in crime or drugs. In contrast, those mothers who had meaningful relationships with their own fathers attempted to build similar relationships between their children and the biological fathers.

Although the present study was limited to maternal reports about the extent of father contact, this methodology has been justified in a recent article by Caspi and colleagues (2001), which identified women as reliable informants about their children's fathers. If anything, maternal reports about paternal behaviors tend to be less extreme than what fathers themselves report (Caspi et al., 2001). The present study demonstrated that maternal perceptions of father involvement provided reliable information about factors that either placed children at risk for developmental problems or protected them from these delays. Even more interesting and reliable findings would likely be revealed if maternal reports were combined with paternal and child reports to assess not only the quantity of father involvement but quality as well. It would also be interesting to include a measure of the quality of father involvement and the child's perceived closeness to the father in future research on the long-term impact of fathers on children's development. Research has suggested that children's perceptions of closeness positively influence their socioemotional development (Veneziano & Rohner, 1998). Finally, there are also complexities associated with the construct of father involvement that are better assessed with measures of the qualities of the

fathers themselves. For example, Jaffee, Moffitt, Caspi, and Taylor (2003) reported that the benefits of father contact depend on the psychological functioning of the fathers, and that fathers with antisocial behaviors are usually not sources of positive influences in their children's lives.

The complex issues surrounding the importance of fathers also extend beyond those relating to the fathers themselves. Many studies have identified grandmothers as influential in the lives of children of adolescent mothers (Dallas, 2004; Hess, Papas, & Black, 2002). It is also widely accepted that maternal grandmothers often act as "gatekeepers," regulating the extent of contact the father is allowed to have with his child (Krishnakumar & Black, 2003). In the present study, the data did not allow for an examination of whether or not grandmothers played a meaningful role in regulating father contact, but such information would have been interesting and may be important to consider in future research.

Another complexity of father involvement not directly addressed in the present study was that of social fathers. For many children whose biological fathers are not involved in their lives, another man such as a grandfather, an uncle, stepfather, or mother's partner may fill a similar role as the father would have (Coley, 2003; Jayakody & Kalil, 2002). Although the benefits of involvement with a social father may not be as straightforward as those of biological father involvement, research has shown that children are at an increased risk for abuse when there is an unrelated male living in the home (Berger, 2004). Even so, many studies of fathers include both biological and social fathers and report positive outcomes associated with father or father figure involvement (Summers, Boller, & Raikes, 2004; Williamson, 2004). In the present study, data were not readily available concerning the extent of involvement by social fathers, so their potential presence could not be accounted for but should also be considered in future research.

Fathers play important roles in their children's development, regardless of whether they live with the biological mothers and their children. Although the exact nature of this role as well as its developmental consequences are understudied, current research has increased society's awareness about the importance of fathers and how and why they should be involved with their children. In a society in which a large percentage of children are raised in single-parent homes, fathers remain integral in providing optimal learning and stable emotional environments in which children can grow and develop to their full potential.

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Received October 26, 2004

Revision received May 30, 2005

Accepted July 1, 2005 ■