

FRANK F. FURSTENBERG, JR.  
KATHLEEN MULLAN HARRIS

10 *WHEN FATHERS MATTER/WHY*  
*FATHERS MATTER: THE IMPACT*  
*OF PATERNAL INVOLVEMENT*  
*ON THE OFFSPRING OF*  
*ADOLESCENT MOTHERS*

After a long period of scholarly neglect, social scientists are finally beginning to pay attention to the influence of fathers on children. This new tide of interest in the role of fathers has been so strong that the standard cliché about fathers being slighted in studies of family behavior hardly applies any longer. Recent research on teenage parenthood represents a particularly good example of the growing interest in the extent and consequences of male involvement.

Years ago, Clark Vincent, in a classic study of unmarried mothers, took note of the social invisibility of unmarried fathers. Vincent traced the inattention to the fathers to a number of different sources. The principal one, he claimed, was the patriarchal assumption in American culture that females must be held primarily accountable for sexual transgressions. "The lack of research on unmarried fathers may be very inconsistent with the fact that they represent one-half the illicit-conception equation, but is quite consistent with, and can be understood within the context of, other social practices and attitudes."<sup>1</sup>

For nearly a quarter of a century Vincent's observation was occasionally registered but left unchallenged. Not until the late 1970s did researchers begin to take full cognizance of the missing male partner of teenage

mothers. In the past five years a veritable outpouring of studies has appeared on teenage fatherhood. Several recent books have culled from the diverse and scattered literature on this subject,<sup>2</sup> and an excellent review by Parke and Neville,<sup>3</sup> commissioned by the Panel on Adolescent Pregnancy and Childbearing, organized and synthesized the burgeoning research on teenage fatherhood.

Not surprisingly, large gaps remain in our understanding of how males contribute to the process of early family formation and the consequences of paternal involvement for the economic and psychological well-being of their offspring. As Parke and Neville note, almost all research on these critical issues is confined to the transition to parenthood and the period immediately following childbirth. Next to nothing is known about patterns of support and participation by fathers beyond infancy into later childhood and adolescence. This void in our information about the continuing role of fathers means that we are largely ignorant of the long-term consequences of paternal involvement for the development of children and young adults.

There are, however, studies on the effect of fathers' participation after marital disruption has occurred. Many researchers have assumed that greater support from nonresidential fathers would reduce the ill effects of divorce.<sup>4</sup> A few small-scale studies have indeed produced findings that are consistent with that assumption.<sup>5</sup> But results obtained from a nationally representative sample of children in maritally disrupted families found that nonresidential fathers' involvement was unrelated to a variety of child outcomes.<sup>6</sup> Children who had more frequent contact with their fathers and had closer relationships with them were not performing better either socially or emotionally in mid-adolescence.

What might explain the perplexing finding that fathers' involvement does not much matter to the well-being of children? First, the level of paternal involvement by fathers living outside the home could be too low to have much impact on the child. Even children with relatively regular relationships might experience relative deprivation and be sensitive to what is lacking in their relationships with their fathers. Second, the effects of participation might vary widely, depending on the way that male attention was received by the residential parents. If mothers did not welcome or were hostile to high levels of involvement, any positive impact might be negated. More involved fathers could pose a threat to the authority of residential parent surrogates (such as stepparents, boyfriends, uncles, and the like), precipitating conflict and competition. Finally, it is conceivable that fathers generally matter less than we might imagine. If relationships

with mothers (or mother surrogates) are positive, the added benefit of a good relationship with a father may not be very significant.

It is difficult to ascertain whether these possibilities apply more broadly to the situation of adolescent parents. We set them forth only as a reminder that the seemingly obvious benefits for children of paternal participation in disrupted (or even intact) families cannot be assumed without stronger evidence than has been produced to date. This chapter examines the consequences of paternal involvement for children's well-being in families formed by adolescent blacks, in an effort to advance our knowledge about the impact of male involvement on children's well-being in a population at great risk of long-term disadvantage. Our study is one of the few to consider the effects of paternal involvement on children in later adolescence and early adulthood. Through the use of a unique longitudinal data set, we have been able to examine the extent and quality of male involvement in the lives of children of teenage mothers for twenty years, and to analyze the effect of that involvement on children's development and well-being as they become young adults. Can we demonstrate that participation by non-residential fathers (both in and outside the home) affects the well-being of children in later life?

### The Baltimore Study

The data are drawn from a study that began in Baltimore during the mid-1960s, as part of an evaluation of this country's first comprehensive care programs for teenage mothers (see appendix A). Some four hundred teenage parents were followed from pregnancy until their children were preschoolers in 1972. The participants were all 18 years old or younger when their first child was born. Most were black, and all came from families that were poor or had only modest means.<sup>7</sup> The first phase of the Baltimore study traced the consequences of early childbearing for the mother and, to a lesser extent, the child. A portion of the analysis dealt with the participation of the males in accounting for the success of the young mother's adaptation to premature parenthood and the early development of their children.

The early findings on male involvement revealed a great deal of diversity. About half of the fathers married the adolescent mother either before or shortly after childbirth. Most of these marriages were short-lived. The continued involvement of formerly married males was only slightly greater than the participation of never-married men at the time of the five-year follow-up.<sup>8</sup> Children sometimes benefited from the involvement of

males outside the home, but the payoff for children was modest because so few nonresidential fathers were participating actively in the support and care of their offspring. By contrast, children of fathers living in the home were doing distinctly better. Whether this was because of the greater paternal attention received or because they enjoyed greater economic security, or because the parents were different even before family formation, could not be discerned from the data.

A seventeen-year follow-up was conducted in 1984 to examine the situation of the adolescent mothers and their offspring in later life. Approximately 80 percent of the original sample was re-interviewed, and data were collected on 296 of the children, who were then between the ages of 15 and 17.<sup>9</sup>

Less than a sixth of the fathers were still living in the home at the seventeen-year follow-up, despite the fact that nearly half of the males had resided with their children for some time. Sustained contact with biological fathers living outside the home occurred in a minority of families. About a fifth of the children had seen their nonresidential fathers at least once a week at the five-year follow-up, and a sixth of the children had regular contact at the seventeen-year follow-up. Attrition in contact occurred over time even though more fathers were living outside the home in 1984 than in 1972. Patterns of contact were quite variable. Some fathers increased or resumed contact as their children reached adolescence, while others diminished their involvement.<sup>10</sup>

Three years later, a twenty-year follow-up of the children was undertaken to determine how the next generation was doing as they moved from their teen years into their early twenties. Completed interviews were obtained from 253 youths, 85 percent of the participants seen three years earlier and about two-thirds of all eligible youths from the original sample. Attrition occurred mainly among white families where the mother was apt to marry or move away from Baltimore during the early years of the study. With very few whites remaining in the 1987 sample, our findings are, at most, generalizable only to blacks living in urban areas.

### Patterns of Paternal Involvement

The children of the teen mothers were between the ages of 18 and 21 at the 1987 interview. We are therefore able to summarize the experiences of all the children with their fathers during the first eighteen years of their lives—covering the full duration of childhood. Table 10.1 shows that just under half of the children had lived with their biological fathers at some time during their first eighteen years. Only about 9 percent, however,

Table 10.1. Number of Years Spent with Each Type of Father Figure during Childhood

| Number of Years | Biological Father |        | Stepfather |        | All Father Figures |        |
|-----------------|-------------------|--------|------------|--------|--------------------|--------|
|                 | %                 | Cum. % | %          | Cum. % | %                  | Cum. % |
| 0               | 53.1              | 53.1   | 52.6       | 52.6   | 7.5                | 7.5    |
| 1               | 2.6               | 55.7   | 0.9        | 53.5   | 0.4                | 7.9    |
| 2               | 7.9               | 63.6   | 6.1        | 59.6   | 3.5                | 11.4   |
| 3               | 6.1               | 69.7   | 4.4        | 64.0   | 3.9                | 15.4   |
| 4               | 5.3               | 75.0   | 5.7        | 69.7   | 2.6                | 18.0   |
| 5               | 1.8               | 76.8   | 4.8        | 74.6   | 4.4                | 22.4   |
| 6               | 0.9               | 77.6   | 3.9        | 78.5   | 4.8                | 27.2   |
| 7               | 2.2               | 79.8   | 1.8        | 80.3   | 5.7                | 32.9   |
| 8               | 1.8               | 81.6   | 1.3        | 81.6   | 3.5                | 36.4   |
| 9               | 0.9               | 82.5   | 4.4        | 86.0   | 9.6                | 46.1   |
| 10              | 0.4               | 82.9   | 1.8        | 87.7   | 5.7                | 51.8   |
| 11              | 1.8               | 84.6   | 3.1        | 90.8   | 7.5                | 59.2   |
| 12              | —                 | —      | 0.9        | 91.7   | 3.5                | 62.7   |
| 13              | 0.9               | 85.5   | 3.1        | 94.7   | 4.4                | 67.1   |
| 14              | —                 | —      | 2.2        | 96.9   | 5.3                | 72.4   |
| 15              | 1.8               | 87.3   | 0.9        | 97.8   | 5.7                | 78.1   |
| 16              | 2.2               | 89.5   | 1.3        | 99.1   | 5.7                | 83.8   |
| 17              | 1.8               | 91.2   | 0.9        | 100.0  | 4.8                | 88.6   |
| 18              | 8.8               | 100.0  | —          | —      | 11.4               | 100.0  |

resided with them during this entire period. Children who ever lived with their fathers spent a median duration of five years (or less than a third of their childhood) living with them. Typically, these years were early in life, although a small number of children had only recently moved in with their fathers. As we have already reported, the proportion of children living with their fathers declined significantly from early childhood until the seventeen-year follow-up, when they were between the ages of 15 and 17. By mid-adolescence, only 16 percent of the children were still living with their biological fathers. At the final follow-up, this number slipped to 14 percent.

Besides the biological father, however, other males were present in the children's family lives. Three out of five children who never resided with their biological fathers lived with a stepfather or father surrogate before reaching the age of 18. Even among the children who did live with their biological fathers at some point, one-third also lived with a stepfather or surrogate father at another time. Half of these children spent at least six years living with a stepfather—just about the same amount of time that

they spent with their biological fathers. As we show in table 10.1, only about 8 percent of the Baltimore youths never resided with any father figure; and at the other extreme, 11 percent lived with a male throughout their entire childhood. On average, the children in this sample spent about half of their early years living with a father of some type.

A quarter of the youths reported at the seventeen-year follow-up that some other male (usually living outside the home) was like a father to them. Often these father figures were kin who had helped raise them. In some cases, they supplemented fathers inside the home, but usually they were mentioned by children who were not living with a father at the time of the interview.

As we mentioned earlier, stepfathers and father surrogates could be viewed as replacements for the biological fathers, as providing complementary relationships, or as competitors. In the analysis that follows, we look at the role of different father figures, contrasting their influence to the influence of biological fathers. Can these other males fill the void created by the disappearance of the biological father?

### Contact with the Biological Father

Early in the study, contact and support from biological fathers living outside the home was relatively high. By the time their children had reached mid-adolescence, many of these males had drifted away. Figure 10.1 assembles information from the different waves of the study, showing a pattern of diminishing contact with biological fathers who were not living with their children. We did not collect detailed information on the amount of interaction with these fathers early in the study, but it is likely that almost all children saw their fathers at least occasionally and that most had regular contact with them during infancy. When the children were still preschoolers, nearly half were either living with their fathers or saw them on a weekly basis. By the end of their teens, 14 percent were living with them; only 15 percent were seeing them as often as once a week; 25 percent were not seeing them regularly but had visited them occasionally in the preceding year; and 46 percent had not had any contact with them at all.

Figure 10.1 also traces the patterns of child support provided by non-residential fathers during the study. A year after delivery, 80 percent of the children were receiving some amount of child support. Four years later, the level of support had plummeted—just one in three received financial assistance from the nonresidential father. By mid-adolescence, the number of children receiving support had dropped to one in six.

Early in the study, never-married fathers were just as likely as previously married males to support their children, but over the long term the

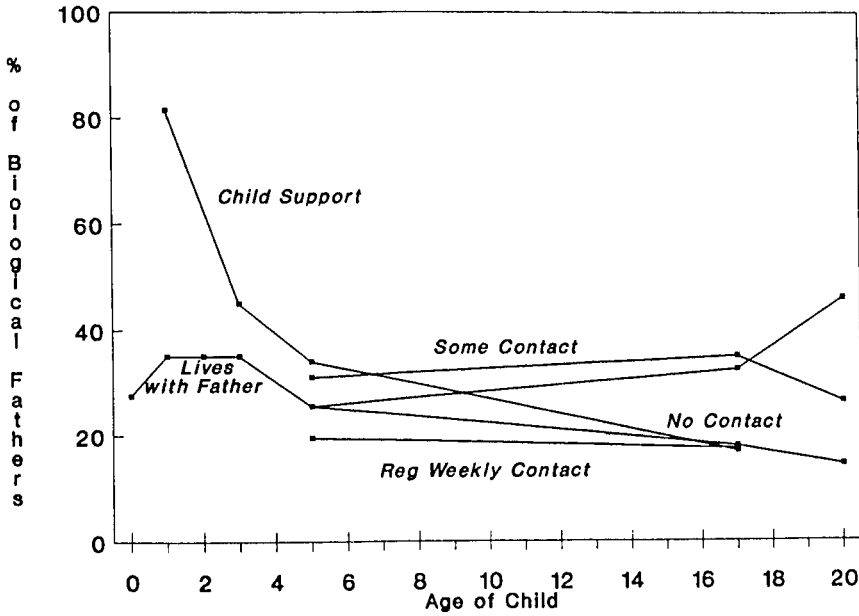


FIGURE 10.1 Percentage of Biological Fathers Providing Child Support Contrasted to Amount of Contact, by Child's Age

fathers who had been married to the child's mother were far more likely to continue to support their children. Of those who were supplying child support in 1972, just one in nine of the never-married men continued to do so in 1984 compared to one in three of the ever-married men. These figures suggest that marriage serves to re-enforce paternal obligations. Fifty-five percent of men who had lived with their children for six or more years were providing child support to their adolescent children, compared to just 17 percent of those who had lived with their children for fewer than three years, and 9 percent of those who never lived with them at all.

Despite some indications early in the Baltimore study that men might take a greater interest in supporting their male than their female offspring, the child's gender was unrelated to the persistence of child support or visitation. However, as we shall see, male children did develop closer bonds with their fathers even though they did not see them more regularly or were not given any greater financial assistance.

### The Quality of Father-Child Relations

Unfortunately, little information on the fathers was collected until the five-year follow-up; therefore, we do not know much about the strength of ties between children and their fathers early in life. At the five-

year follow-up, we did learn from the mothers that 65 percent of their children who had contact with their fathers "enjoyed" the relationship very much; according to the mothers, 35 percent enjoyed it only somewhat or not at all.

The 1984 interview, conducted when the children were between the ages of 15 and 17, permitted us to measure the quality of father-child relationships more systematically. Children were asked to evaluate *the degree of closeness* and *the extent to which children identified* with their biological fathers (if they had any contact with them) as well as with other father figures living both inside and outside the home. Their responses to the measure of closeness and identification were combined to form an index of attachment.<sup>11</sup>

Figure 10.2 shows the proportion of children who bonded strongly with different father figures. Not surprisingly, children report the highest level of attachment to biological fathers living in the home. Still, only 50 percent are strongly attached to them, according to our measure. By comparison, a similar measure on attachment to mothers revealed that 58 percent were strongly bonded. Both these figures are somewhat below the proportions for all blacks of similar age in the National Survey of Children, which contained an almost identical measure.<sup>12</sup>

The index of attachment nicely captures the decline in the strength of ties with the biological father when he lives outside the home. Overall, just 13 percent (not shown) report strong bonds with nonresidential biological fathers. This figure, however, conceals an important distinction. It includes nearly two-fifths (38 percent) of the adolescents in 1984 who had not seen their fathers in the past year. By contrast, of those who had at least some contact with their biological fathers, 21 percent indicated that they

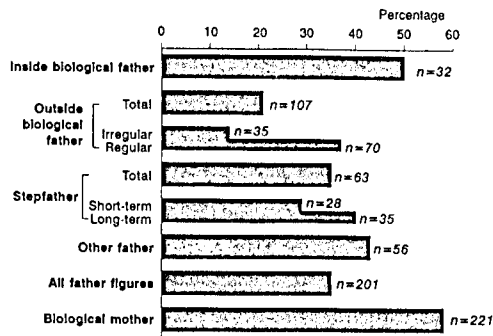


FIGURE 10.2 Percentage Strongly Attached to Father, by Type of Father Figure  
Note: Sample size on breakdown of Outside Biological Father is less than total because of missing values on contact.



had a strong bond. This figure rises to 37 percent among those who saw their fathers once a week or more on average. Thus, the gap in bonding narrows substantially when we compare fathers living at home and fathers who have regular contact with their children.

Early contact between fathers and their children has no lasting effect on the level of closeness in their relationship unless it is sustained throughout the study. Although ever-married fathers have invested more in their children than have never-married men, they do not necessarily develop closer relationships with their offspring when they continue to see them. Even those fathers who were in the home for six or more years do not experience a stronger bond with their adolescent children than do fathers who were present for less than six years or were never in the home.

In recent qualitative interviews with a subsample of the children, we learned that many of those most bitterly disappointed with their fathers' efforts had enjoyed a closer relationship earlier in childhood. This may help to explain why so few nonresidential fathers are regarded as important role models by their offspring *even when* the fathers continue to see them on a regular basis and provide child support. These children are experiencing a sense of "relative deprivation" in their relationships with their biological fathers. Here is an account from one of the Baltimore youths, talking about important figures in his life:

Q. But your father has not played a big role in your life?

A. No. He hasn't. My father moved away. . . . Then he moved back here when I was in high school. We are able to talk. I don't respect him. I don't have anything against him, when he first came back, he was pretty much in my life.

A sizable minority (28 percent) of the children were living with a stepfather or a live-in father figure (the mother's boyfriend) in 1984. We refer to all residential fathers other than biological fathers as stepfathers, regardless of whether they were actually married to the child's mother. More than a third of the children living with a stepfather were highly attached to him. To examine only the more stable stepfather relationships, we defined those residential fathers who had lived in the household for six years or longer as long-term stepfathers. Long-term father-child relationships occurred in more than half of the stepfamilies, and 40 percent of the children developed a close bond with the stepfather. In contrast, of the approximately half who had a short-term stepfather in the home (for less than six years), 29 percent were highly attached to him. Evidently, the steady presence of a stepfather is often conducive to developing a strong paternal attachment, just as happens when the biological father resides in the house.

About a fourth of the children mentioned that they had someone other than a biological father or residential stepfather who was "like a father to them." About 43 percent of these children reported having a high-quality relationship with the surrogate father. Overall, 11 percent of the sample had a strong tie to a male who was neither a biological father nor a stepfather.

Taking all these father figures into account, just 1 percent of the children had a strong relationship with two or more fathers; 30 percent reported a strong tie to at least one; and 69 percent had no father figure to whom they were highly attached. Although we did not carry out an extensive analysis of the antecedents of these attachments, we did examine whether children were more likely to form a strong attachment to a father of any type if their mothers had ever married. In fact, adolescents whose mothers ever married were twice as likely to have a close relationship with a father figure as those whose mothers never married. When the mother married the biological father, the probability of a strong father-child bond forming was especially pronounced.

Although boys were not more likely than girls to have contact with a father figure, they did establish closer bonds to their fathers when there was contact. Among those who had contact with any type of father, 44 percent of the boys versus 27 percent of the girls were strongly attached to him. Regardless of the type of father figure, boys consistently report closer relationships than do girls.

In summary, only a small minority of the children of teen mothers form close bonds to their biological father (who may or may not live in the home); a somewhat greater number (but still a small fraction of the total sample) develop strong ties with another father figure, either a stepfather in the home or a relative or former stepfather outside the home. This brings us to the central question of whether relationships with these different father figures affect how well the children do in early adulthood.

In addressing the effect of paternal involvement on children's well-being, we examine the impact of paternal involvement (of both biological fathers and father surrogates) measured in 1984 on various outcomes measured in 1987. The measures in 1984 summarize a history of relationships between children and their fathers. Although a great number of children saw relationships with their biological fathers deteriorate at some point in their childhood, only a handful experienced the opposite situation—a strengthening of ties after early childhood. In consequence, we cannot say a great deal about how changing patterns of paternal involvement affect the development of children. But we can at least be reasonably certain about the direction of causality. We will investigate whether greater in-

involvement of fathers and the establishment of a strong bond with their children before or by mid-adolescence leads to better outcomes in early adulthood.

### Measures of Youth Well-Being in Early Adulthood

The twenty-year follow-up provides a wide range of measures of successful adjustment in early adulthood. We have selected four different indicators of well-being: (1) socioeconomic achievement measured by an index of educational and employment attainment; (2) whether the youth had a child before the age of 19; (3) whether the child had spent time in jail; and (4) a subset of items from the Beck Depression Inventory. The construction of these measures is described in greater detail in Appendix B.

A comparison of the Baltimore youths with their counterparts in the National Survey of Children (NSC), a nationally representative study of youths between the ages of 17 and 22, revealed that, at least among blacks, teenage childbearing appears to have only a modest effect in determining the life chances of youths in their late teens (see table 10.2). The patterns of educational attainment and early fertility among children of teen mothers in the Baltimore study and the NSC were almost identical. Imprisonment was far higher in the Baltimore sample, but we are reasonably sure that the disparity is the result of the failure of the NSC (a telephone survey) to get accurate reports and to locate youths who were in jail in their teen years. The NSC did not contain the Depression Scale, but other measures of emotional well-being yielded comparable results. When compared to the children of later childbearers, the offspring of adolescent mothers did not do as well on a wide range of outcomes, but the differential in performance was not very large.

Nonetheless, a number of youths in the Baltimore study were displaying serious problems by their late teens and early 20s. About a third dropped out of high school and did not show any immediate prospect of graduating or obtaining a GED, the test of high school equivalency; almost a quarter (a third of the girls and 15 percent of the boys) had a birth by the age of 19; 16 percent of the youths (2 percent of the girls and 30 percent of the boys) had been or were in jail; and 31 percent showed a strong indication of depressive affect.

### The Presence of Fathers and Youth Well-Being

How much of the variability in the four outcomes can be traced to the presence or absence of males in the lives of the youths we studied? We first

TABLE 10.2. Selected Outcome Variables for Baltimore Youths and NSC

| Percentage of:                    | Baltimore<br>Males | Baltimore<br>Females | All Baltimore<br>Youth | NSC<br>Early | NSC<br>Later |
|-----------------------------------|--------------------|----------------------|------------------------|--------------|--------------|
| <b>Education</b>                  |                    |                      |                        |              |              |
| HS Grad or GED                    | 58                 | 68                   | 63                     | 72           | 81           |
| In School Now                     | 35                 | 39                   | 37                     | 32           | 51           |
| Ever Dropped Out of HS            | 40                 | 29                   | 34                     | 23           | 16           |
| Ever Repeated a Grade             | 49                 | 36                   | 42                     | 38           | 29           |
| <b>Marriage and Relationships</b> |                    |                      |                        |              |              |
| Ever Married                      | 2                  | 6                    | 4                      | —            | —            |
| Living with Partner               | 2                  | 11                   | 6                      | 5            | 4            |
| <b>Fertility</b>                  |                    |                      |                        |              |              |
| Ever Pregnant                     | 42                 | 57                   | 49                     | —            | —            |
| Ever Live Birth                   | 25                 | 38                   | 31                     | —            | —            |
| Had Sex                           | 98                 | 95                   | 96                     | 84           | 94           |
| <b>Economic</b>                   |                    |                      |                        |              |              |
| Currently Employed                | 58                 | 54                   | 56                     | 54           | 60           |
| On Welfare in 1986                | 0                  | 24                   | 12                     | 16           | 8            |
| 1986 Income \$1 to 4,999          | 63                 | 68                   | 66                     | 70           | 63           |
| \$5,000 to 9,999                  | 20                 | 21                   | 20                     | 14           | 26           |
| \$10,000 to 19,999                | 15                 | 10                   | 12                     | 16           | 11           |
| <b>Drugs and Delinquency</b>      |                    |                      |                        |              |              |
| Used Alcohol                      |                    |                      |                        |              |              |
| Ever                              | 81                 | 74                   | 77                     | 65           | 65           |
| In Past 12 Months                 | 61                 | 57                   | 58                     | 42           | 50           |
| Used Pot                          |                    |                      |                        |              |              |
| Ever                              | 66                 | 49                   | 57                     | 40           | 38           |
| In Past 12 Months                 | 36                 | 24                   | 30                     | 15           | 19           |
| Used Cocaine                      |                    |                      |                        |              |              |
| Ever                              | 19                 | 7                    | 13                     | 5            | 11           |
| In Past 12 Months                 | 9                  | 3                    | 6                      | 2            | 3            |
| Damaged Another's Property        |                    |                      |                        |              |              |
| Ever                              | 40                 | 15                   | 27                     | 22           | 17           |
| In Past 12 Months                 | 14                 | 6                    | 10                     | 10           | 6            |
| Carried Hidden Weapon             |                    |                      |                        |              |              |
| Ever                              | 26                 | 5                    | 15                     | 7            | 8            |
| In Past 12 Months                 | 14                 | 2                    | 8                      | 4            | 6            |
| Stole Something Worth \$50+       |                    |                      |                        |              |              |
| Ever                              | 18                 | 2                    | 10                     | 2            | 5            |
| In Past 12 Months                 | 7                  | 2                    | 4                      | 1            | 2            |

(continued)

TABLE 10.2. (Continued)

| Percentage of:  | Baltimore<br>Males | Baltimore<br>Females | All Baltimore<br>Youth | NSC<br>Early | NSC<br>Later |
|---|--------------------|----------------------|------------------------|--------------|--------------|
| Attacked Person with<br>Intent to Hurt                            |                    |                      |                        |              |              |
| Ever  | 15                 | 9                    | 12                     | 5            | 11           |
| In Past 12 Months   | 9                  | 8                    | 8                      | 2            | 6            |
| Sold Drugs  |                    |                      |                        |              |              |
| Ever  | 24                 | 5                    | 14                     | 6            | 2            |
| In Past 12 Months   | 9                  | 2                    | 5                      | 3            | 0            |
| Ever Stopped by Police  | 75                 | 19                   | 47                     | 28           | 27           |
| Ever Been in Jail   | 30                 | 2                    | 16                     | 3            | 3            |
| In Jail Now   | 17                 | 0                    | 7                      | —            | —            |
| Psychological Well-Being  |                    |                      |                        |              |              |
| Got Help from<br>Mental-Health<br>Professional in<br>Past 3 Years | 10                 | 13                   | 12                     | 5            | 13           |
| How Life Going:<br>Very Well                                      | 28                 | 35                   | 31                     | 39           | 44           |
| Number of Participants  | 125                | 127                  | 252                    | 103          | 63           |

examined a series of bi-variate comparisons that tested the overall effect of the presence of four different types of father figures on each outcome measure: whether a biological father was present in the home; whether the child had contact with the nonresidential biological father; whether a step-father was present in the home; and whether the youth mentioned an adult male (inside or outside the home) who was like a father.

Figure 10.3 displays the results of these bi-variate comparisons in a series of bar graphs. The results compare the magnitude of difference on any of the four outcome measures for the presence (or absence) of different father figures. Take, for example, the initial comparison examining the outcomes for children who were or were not living with a biological father in 1984. The results for the different outcomes three and a half years later are surprising, for they show a relatively modest effect of having a biological father in the home. While in all cases the relationship was in the predicted direction, it did not reach statistical significance for three out of the four outcome measures, imprisonment being the exception.

Turning to the influence of the biological father outside the home, we found that the overall effect of the child's having contact with him is even less apparent. Children who had contact with nonresidential fathers were

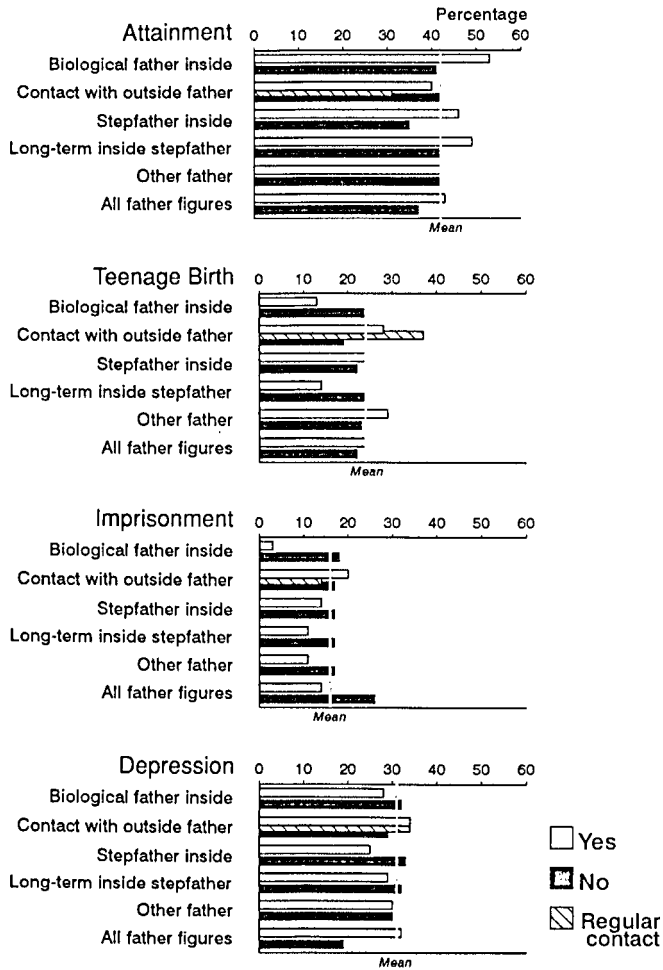


FIGURE 10.3 Youth Outcomes, by Presence of Father Figures

not doing better than youths who had not seen their fathers in the past year in all measures of outcomes. Even when we confined our comparisons to fathers whom children saw regularly, no consistent effects were detected on the outcome measures.

Similar results emerge when we examine the bi-variate effect of other father figures living either inside or outside the home. Children in stepparent households at the time of the 1984 interview were not doing better on the various outcome measures three and a half years later. When we confined our contrasts to children who were in stable stepparent families (where they had resided with the steppather for at least six years), we

detected a modest but not statistically significant effect. Like the children of biological fathers in the home, the youths with long-term stepfathers did not seem to be doing a great deal better in early adulthood than all the other youths in the study.

Finally, we examined the youths living in single-parent households who identified a person who was like a father to them. Compared to their peers who mentioned no such person, these youths fared no better at the twenty-year follow-up, although they were less likely to be high on the depression measure. In sum, the presence of fathers at most appears to have only a weak effect on key outcomes in early adulthood.

There are several possible explanations for the limited impact that a father's presence has on his child's well-being. It may be that the protective benefits of living with the biological (or step-) father is not very conspicuous among the tiny group of children who lived in stably married families because many of these children often do not have very close relations with their fathers. It is also possible that children not living in two-parent families do as well because other father figures assume an important role in their lives, although our bi-variate comparisons seem not to support this explanation. Alternatively, we might find that involvement with fathers of any type may bring only modest advantages to the children in our study. Perhaps, as we pointed out in our introductory remarks, relations with the mother may override the effect of paternal involvement.

These different interpretations can be partially tested with the data at hand. Figure 10.4 examines the same four constellations of paternal involvement, subdivided according to the quality of the relationship between youths and their fathers. Adding the information on the strength of the ties between fathers and their children brings the results into sharp focus. Youths do far better at the twenty-year follow-up if they have a close relationship with any of the different father figures. But close ties count for more when the youths are living with a father than when they are not.

Let us look first at the children who were living with their biological fathers. We recall that these youths were split evenly into those who were close to their fathers and those who were not. Between these two groupings, a huge difference occurs in three out of four outcomes. Among those who had a close bond with their fathers, more than two-thirds were high on the measure of attainment, having entered college or found stable employment after graduating from high school; none had had a child before the age of 19; and only a fifth were high on the depression index. (The incidence of serious problems with the law was also low but not different from the incidence among youths who were not close to their residential biological fathers.) By contrast, the youths living with their

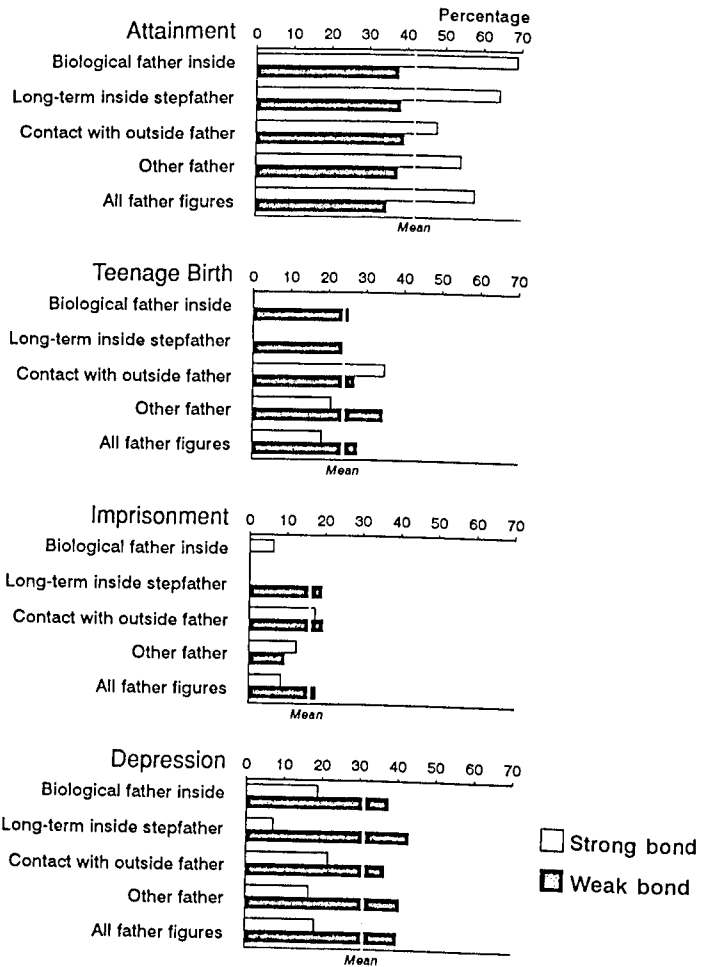


FIGURE 10.4 Youth Outcomes, by Level of Attachment to Father Figures

biological fathers who were not as close were actually doing worse on average than all other youths in the sample.

The identical pattern recurred when we examined the youths who were living in stepfamilies. The third of the youths who had close ties with their stepfathers were performing extremely well in early adulthood, especially if we consider the children who had long-standing and stable relationships with their stepfathers. The offspring in these families were doing as well as the youths who grew up with their biological fathers. It appears that the conjunction of stable *and* close relations with a male figure in the home produces high rates of successful adjustment in early adulthood.

This finding is echoed among the youths who were not living with a



father but were strongly attached to him at the time of the seventeen-year follow-up. Although they were not doing as well as the young adults who had had the benefit of growing up with a father in the home throughout early adolescence, they were performing significantly better than youths who had not established a close tie with a father figure in three of the outcome measures. The exception is the measure of teen childbearing where closer ties predict higher rates of teen parenthood. We shall have more to say later about this anomalous result.

Finally, in figure 10.4 we can also see that children who had a close relationship with a male who was like a father to them also did better than average in the three of four outcome measures. Again, anything less than a close tie to a father surrogate does not improve children's chances of doing well in the four outcome measures.

The findings described in figures 10.3 and 10.4 were reproduced in a multi-variate analysis that examined the independent effects of the presence of different father figures and the attachment to each in the outcome measures. We also included the level of attachment to the mother, which may mediate some of the father effects. Finally, we examined the possibility that the effects were different for boys and girls by testing for gender interactions.

Logistic regression was used to estimate the effects that determine each of the four outcomes. Appendix C displays the full set of net effects, while table 10.3 shows the results of our final models of selected effects for each dependent outcome measure. In the multi-variate analysis, we combined stepfathers and residential biological fathers to indicate the presence of an "inside father."

The multi-variate analysis confirmed the bi-variate findings.

The presence of various father figures has relatively little impact on the youth outcomes. And when we enter the degree of attachment to a father figure in our models, the effect of the father's presence all but disappears, while positive outcomes are enhanced when a strong bond exists with the father (shown in appendix C).

Table 10.3 shows the net effects of a strong attachment to an inside father (biological or step), a nonresidential biological father with whom the youth has contact, and an "other" father. Measures of a father's presence were dropped in the final models, since they did not differentiate any of the outcomes. The effects both of attachment to the mother and of the child's gender are also estimated in each model. The first column under each outcome lists the beta coefficients or the additive effects. The second column shows the odds ratio for each effect.

The results indicate that attachment to a father figure has beneficial

TABLE 10.3. Independent Effects of Attachment to Father Figures on Outcomes in 1987

|                         | Attachment |            | Teenage Birth |            | Imprisonment |            | Depression |            |
|-------------------------|------------|------------|---------------|------------|--------------|------------|------------|------------|
|                         | b          | odds ratio | b             | odds ratio | b            | odds ratio | b          | odds ratio |
| Gender of Child         | .092       | 1.10       |               |            |              |            |            |            |
| Close to Inside Father  | .767*      | 2.15       | -1.24**       | .29        | 2.91**       | 18.4       | -.552      | .58        |
| Close to Outside Father | .226       | 1.25       | -1.33*        | .26        | -1.58*       | .21        | -.997*     | .37        |
| Close to Other Father   | .524       | 1.69       | 1.10*         | 3.00       | -.30         | .74        | -.339      | .71        |
| Close to Mother         | -.307      | .74        | -.08          | .92        | -.12         | .89        | -1.116     | .33        |
| Intercept               | -.400      | —          | .10           | 1.11       | -.72         | .49        | -.319      | .73        |
| n                       | 221        | —          | -.623         | —          | -3.165       | —          | -.169      | —          |
|                         |            |            | 221           | —          | 221          | —          | 221        | —          |

\*.05 } Levels of Significance  
 \*\*.01 }

effects in all outcome measures as the youths enter adulthood. Again, the only exception is the impact of a close tie with the nonresidential biological father on teenage childbearing. Children who live with their biological fathers or stepfathers in long-term relationships benefit the most from strong bonds with their inside fathers. Youths who were strongly attached to a residential father were twice as likely to have entered college or to have found stable employment after high school; 75 percent less likely to have been a teenage parent, 80 percent less likely to have been in jail, and half as likely to have experienced multiple depression symptoms. The positive effects of a close bond with an inside father are significant for all of the outcomes measuring a successful transition to adulthood.

A strong attachment with another father figure also appears to improve a youth's chances of high attainment and to reduce depression symptoms, although the effects are not statistically significant. The probability of a teenage birth and imprisonment is also reduced if youths have close bonds with other males who are like fathers to them; however, these effects are weak.

A close bond with the outside biological father has the least impact on youth outcomes. Although the children who had contact with and were strongly attached to their nonresidential biological fathers were more likely to have high measures of attainment and more likely to avoid imprisonment and depression, the advantage of the attachments is only marginally beneficial.

In fact, a perverse effect is evident for the teenage-birth outcome. Youths who were strongly attached to their nonresidential fathers were more likely to experience early childbearing than those who were not attached to their outside biological fathers or had no contact with them. Our exploration of gender interactions revealed why this result occurs. Boys who had contact with and were strongly attached to their nonresidential fathers were more likely to report a teen birth than were girls who had close ties with their outside fathers. Since boys are over represented among youths having strong bonds with their outside fathers, this interaction increases the overall chances of teenage childbearing for youths attached to their outside fathers.<sup>13</sup>

Oddly, the level of attachment to the biological mother has very little impact on the well-being of youths as they enter adulthood. A close tie with the mother does not mediate the effects of attachment to a father figure, nor does it improve the chances of educational or economic attainment or lower the probability of teenage childbearing. Closeness to the mother does reduce the likelihood of imprisonment and depression, but not significantly. We were surprised to find that those children who had

close bonds with their mothers were not doing significantly better in the measures of well-being in 1987 than were the youths who were not close to their mothers. Perhaps this is because the variability in maternal closeness was low, but it may suggest that this measure takes on different meaning when it is applied to mothers rather than fathers.

These results redefine our understanding of the psychological impact of fathers in the lives of disadvantaged children. They also help to explain the frequently contradictory findings of earlier research that attempted to establish the psychological benefits for children of paternal involvement. Do fathers contribute to the child's psychological well-being, apart from the economic assistance that they provide? The answer appears not to be a straightforward yes or no.

The presence of a father inside the home confers only a modest advantage when we examine four varied measures of children's well-being; contact, even regular contact, with fathers outside the home had little effect on positive youth outcomes. Children benefit only from a close paternal relationship. Unfortunately, more often than not, the ties that they develop with fathers are neither continuous nor close.

Public policy cannot regulate family intimacy, but it may be able to foster conditions that promote stronger bonds between children and their fathers. The Baltimore study furnishes evidence that marriage, especially a marriage that survives, indirectly increases the likelihood of successful adjustment in early adulthood by boosting the odds of a strong paternal bond. Unfortunately, we know little about the conditions that produce stable marriages.

It is believed that economic security, especially for males, may contribute to the desirability of marriage and its durability. While such a belief seems plausible enough, it is not buttressed by a great deal of data. There is no simple correlation between economic cycles and separation statistics, but there is some support for the proposition that unions falter or are never formed when expectations of male contributions are low. We need to look more carefully at ways of increasing the economic benefits of marriage in hopes that it may indirectly lead to a greater sense of children's well-being.

Clearly, marriage is not always in a woman's or a child's best interests. Unstable marriages and conflictual relationships within marriage elevate the chances of a poor relationship with a father outside the home. And our data show that a poor relationship is worse than no relationship at all. It may interfere with the child developing a bond with another father figure, disturb his or her relationship with the mother, or directly undercut the child's ability to function as an adult. In consequence, we walk a thin line

when we attempt to promote matrimony as a public good if many or most marriages turn out to be unstable or conflict ridden.

The same logic applies in maintaining ties between fathers and children. Obviously, insisting that fathers maintain economic obligations to their children has economic benefits. The maintenance of contact may also have social and psychological advantages for children. Again, however, our evidence suggests a qualified response. Only a third of the males who had regular contact with their children, and even fewer who were providing child support, had developed strong bonds with their offspring. Unless we can manage a better record than that, the claim of psychological benefits for children is dubious, if our results are any indication. We must remember, however, that our findings, if they can be generalized at all, apply only to African Americans who began families at an early age.

No one knows how to foster stronger and more lasting attachments between children and their fathers, whether the fathers are biological or surrogate. Establishing support groups for prospective fathers represents a constructive step, but these services probably do too little for too few fathers over too brief a time to make much difference in children's later lives. The successful design of more lasting programs remains a high priority. This may involve the location in the child's social network of male support figures who may fill in for absent fathers. Whether we can engineer a strong paternal bond by cultivating such ties is a question open to further exploration.

It is also clear from our data that some children do well without a paternal presence. Can we assume that one parent is sufficient so long as that parent is a skillful and loving figure? Perhaps other figures enter the child's life who may not be father surrogates but who provide additional guidance, support, and material assistance. We need to know more about how and why children manage successfully in solo-parent families.

The general rediscovery of the importance of fathers in children's lives is a salutary development in social science research. The restoration of the father's place in the family undoubtedly has important implications for public policy. Our greatest fear, however, is that we may leap to action before we learn what those implications are.

## APPENDIX A. Design of the Baltimore Study, 1966-1987

| Schedule of Interviews <sup>1</sup>                    | Interview |   |            | Attempted |            |
|--|-----------|---|------------|-----------|------------|
|  | Dates     | Participants  | Interviews | Number    | Percentage |
| Time 1: during pregnancy                               | 1966-1968 | Adolescent Mothers,<br>Grandmothers   | 404        | 404       | 100        |
| Time 2: one year after delivery                        | 1968-1970 | Adolescent Mothers  | 404        | 350       | 92         |
| Time 3: three years after delivery                     | 1970      | Adolescent Mothers, <sup>2</sup><br>Classmates  | 404        | 363       | 90         |
| Time 4: five years after delivery                      | 1972      | Adolescent Mothers,<br>Children of Adolescent Mothers,<br>Classmates                          | 404        | 268       | 74         |
| Time 5: sixteen to seven-<br>teen years after delivery | 1983-1984 | Adolescent Mothers<br>or Surrogates   | 331        | 331       | 82         |
|  |           |   | 307        | 306       | 92         |
|  |           |   | 404        | 221       | 72         |
|  |           |   | 35         | 289       | 80         |
| Time 6: 18-21 years after delivery                     | 1987      | Children of Adolescent Mothers<br>National Survey of Children<br>(Blacks, 15 to 16 years old) | 392        | 296       | 7          |
|  |           |   | 96         |           |            |
|  |           | Children of Adolescent Mothers<br>National Survey of Children<br>(Blacks, 18 to 21 years old) | 377        | 253       | 67         |
|  |           |   | 169        |           |            |

<sup>1</sup>This category includes a small number of interviews that were excluded from the analysis because of a large amount of missing or falsified information.

<sup>2</sup>Interviews were also obtained with about one-third of the fathers at this time.

## Appendix B. Description of Outcome Measures of Youth Well-Being

*Teen birth.* This measure indicates whether the adolescent had mothered or fathered a child before the age of 19. Direct questions about childbearing and fertility histories provided the information. All youths had reached the age of 19 (with the exception of a small number who were a few months from their nineteenth birthday) by the 1987 interview, so that exposure was not an issue. Among the adolescents in the Baltimore study, 24 percent had experienced a teenage birth (33 percent of the girls and 15 percent of the boys).

*Attainment.* This measure is based on an intricate coding scheme entailing academic achievement and subsequent work history. Briefly, our method first considered the adolescent's educational achievement and then adjusted the score by taking into account the employment record. Youths who had graduated from high school and were attending college or graduate school were coded at the high end of the attainment scale. Also, high school graduates in steady employment were scored high on attainment. The youths coded in the middle range were high school graduates who were unemployed but looking for work or were in a training school, and those adolescents still in high school and at grade level. Adolescents still in high school but who had failed one or more grades fell at the low end of the attainment scale. And finally, high school dropouts were also at the bottom of the attainment scale, unless they had accumulated substantial work experience (which moved them up the index slightly). Represented as a three-category index (collapsed from a five-category index), 42 percent were high on attainment, 24 percent fell in the middle range, and 34 percent scored low on attainment.

*Depression.* This indicator is an additive scale based on a subset of twelve items from the Beck Depression Inventory measuring emotional well-being. Various statements were read to the adolescent concerning his or her emotional state, to which the adolescent responded that he or she had felt that way most of the time, some of the time, only a little of the time, or none of the time during the previous four weeks. Examples of some of the items are: I felt sad; I was bothered by things that usually don't bother me; I did not feel like eating, my appetite was poor; I felt that I could not shake off the blues, even with help from my family or friends; I had trouble keeping my mind on what I was doing; I felt depressed; I felt fearful; My sleep was restless; I felt lonely.

Responses for each item ranged from 0, indicating no incidence, to 3, indicating frequent occurrence of the adverse emotional state. An additive index was constructed from these twelve items by summing their responses. The index was then dichotomized by selecting the proportion who fell above one-half of a standard deviation above the mean indicating excessive symptoms of depression. For the sample as a whole, 31 percent fell in this tail end of the distribution.

*Imprisonment.* This outcome indicates whether the adolescent had ever spent any time in jail, prison, or a correctional facility. Delinquent behavior among the Baltimore children displayed the typical gender pattern: 3 percent of the girls and 29 percent of the boys had spent some time in jail, or 16 percent overall who had ever been in jail. These percentages differ from table 10.2 because of missing values.



APPENDIX C. Full Net Effects of Presence and Attachment to Father Figures

|                             | Attachment    |      | Teenage Birth |        | Imprisonment |        | Depression |        |
|-----------------------------|---------------|------|---------------|--------|--------------|--------|------------|--------|
|                             | 1             | 2    | 1             | 2      | 1            | 2      | 1          | 2      |
|                             | Gender = Boys | .12  | .08           | -.96** | -1.05**      | 2.54** | 2.80**     | -.77** |
| Inside Father               | .40           | .17  | -.14          | .23    | -.66         | -.13   | -.36       | .06    |
| Contact with Outside Father | -.13          | -.20 | .87*          | .72    | .16          | .23    | .21        | .23    |
| Other Father                | .14           | -.02 | .43           | .52    | -.39         | -.90   | -.14       | .10    |
| Early Child Support         | .19           | .26  | -.40          | -.57   | .20          | .11    | -.004      | .02    |
| Close to Inside Father      | —             | .65  | —             | -1.37* | —            | -1.48  | —          | -1.04  |
| Close to Outside Father     | —             | .27  | —             | 1.00   | —            | -.55   | —          | -.48   |
| Close to Other Father       | —             | .51  | —             | -.33   | —            | .70    | —          | -1.24  |
| Close to Mother             | —             | -.31 | —             | .02    | —            | -.68   | —          | -.19   |
| Intercept                   | -.59          | -.48 | -1.09         | -1.00  | -3.38        | -3.10  | -.37       | -.34   |
| n                           | 219           | 215  | 219           | 215    | 219          | 215    | 219        | 215    |

\*.05 } Levels of Significance  
 \*\*.01 }

## Notes

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1. Clark Vincent, *Unmarried Mothers* (New York: Free Press, 1961), p. 5.
2. Arthur Elster and Michael E. Lamb, *Adolescent Fatherhood* (Hillsdale, N.J.: Lawrence Erlbaum, 1986); Bryan Robinson, *Teenage Fathers* (Lexington, Mass.: Lexington Books, 1988).
3. Ross D. Parke and Brian Neville, "Teenage Fatherhood," in Cheryl D. Hayes, ed., *Risking the Future* (Washington, D.C.: National Academy Press, 1987), 2: 145-73.
4. P. Lindsay Chase-Lansdale and E. Mavis Hetherington, "The Impact of Divorce on Life-Span Development: Short and Long-Term Effects," in Paul B. Baltes, David L. Featherman, and Robert Lerner, eds., *Life-Span Development and Behavior* (Hillsdale, N.J.: Lawrence Erlbaum, 1989), 10: 105-50; Robert E. Emery, *Marriage, Divorce, and Children's Adjustments* (Beverly Hills: Sage Publications, 1988); Robert Weiss, *Marital Separation* (New York: Basic Books, 1975).
5. E. Mavis Hetherington, M. Cox, and R. Cox, "The Aftermath of Divorce," in Joseph H. Stevens, Jr., and Marilyn Matthews, eds., *Mother-Child, Father-Child Relations* (Washington, D.C.: National Association for the Education of Young Children, 1978), pp. 149-76; Robert D. Hess and Kathleen A. Camara, "Post-Divorce Family Relationships as Mediating Factors in the Consequences of Divorce for Children," *Journal of Social Issues* 6 (1979): 79-98; Judith S. Wallerstein and Joan B. Kelly, *Surviving the Breakup* (New York: Basic Books, 1980).
6. Frank F. Furstenberg, Jr., S. Philip Morgan, and Paul A. Allison, "Paternal Participation and Children's Well-Being After Marital Dissolution," *American Sociological Review* 52 (1987): 697-701.
7. Frank F. Furstenberg, Jr., *Unplanned Parenthood* (New York: The Free Press, 1976).
8. Frank F. Furstenberg, Jr., and Kathie Talvitie, "Children's Names and Paternal Claims: Bonds between Unmarried Fathers and Their Children," *Journal of Family Issues* 1 (Winter 1979): 31-57; Frank Mott, "When Is a Father Really Gone?: Paternal-Child Contact in Father-Absent Homes," *Demography* 27 (Fall 1990): 499-517.
9. Almost all of the children lost to follow-up had left the study in the first phase. Some, especially the small number of whites in the sample, had moved out of the Baltimore area and were excluded; about 10 percent of the children had been put up for adoption or had died. For further details about the sample, see Frank F. Furstenberg, Jr., Jeanne Brooks-Gunn, and S. Philip Morgan, *Adolescent Mothers in Later Life* (New York: Cambridge University Press, 1987).
10. Frank F. Furstenberg, Jr., and Kathleen M. Harris, "The Disappearing American Father? Divorce and the Waning Significance of Biological Parenthood." Paper

presented at the conference on "Demographic Perspectives on the American Family: Patterns and Prospects," Albany, N.Y., April 1990.

11. The index of attachment was constructed using children's responses from two items measuring closeness and identification in the father-child relation:

How close do you feel to your father?

1. extremely close
2. quite close
3. fairly close, or
4. not very close?

How much do you want to be like the kind of person he is when you're an adult?

1. a lot
2. quite a bit
3. just a little, or
4. not at all?

The response distributions were standardized by categorizing the top two responses as high and the bottom two as low. An additive index was then formed by summing the high response so that a 2 on the index indicated that the father-child bond was very strong ("high" on both measures of attachment). Levels of strong attachment shown in subsequent tables and figures thus refer to this high score on the index, where attachment in the father-child relation is the greatest.

12. Kathleen M. Harris and Frank F. Furstenberg, Jr., "Affective Mobility: The Course of Parent-Child Relations in Adolescence." Paper presented at the annual meeting of the American Sociological Association, Washington, D.C., August 1990.

13. When we explored the possibility that attachment to a father figure may result in different outcomes for boys and girls, no significant interactions were found, with the exception that boys who were highly attached to their nonresidential fathers were more likely to report a teenage birth than girls who had a close bond with their outside fathers. However, the effects of the interactions between gender and attachment revealed an interesting pattern with regard to the outcomes. Girls who were strongly attached to a father figure experienced greater success in the outcome measures than did the boys who were attached to a father. This result explains why we observed no gender differences in the four outcomes. Boys more often enjoy a close relationship with their fathers than do girls, and the steady presence of a father may increase their chances of doing well, if only because it provides the arena for forming a close bond with a father figure. But even though girls are less likely to become strongly attached to a father figure, they apparently derive greater benefits from that attachment. In other words, controlling for all other effects, when a girl forms a close bond with a father, her chances of favorable outcomes are better than when a boy is highly attached to a father. However, because more boys develop close ties with a father figure, the interactive effect balances the compositional effect, resulting in similar probabilities of a successful transition to adulthood by gender.

EDITED BY  
ANNETTE LAWSON  
AND DEBORAH L. RHODE

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