Mothers' Repartnering after a Nonmarital Birth

Sharon H. Bzostek
Harvard University

Sara S. McLanahan
Princeton University

Marcia J. Carlson
University of Wisconsin-Madison

November 2009

---

*Sharon Bzostek (sbzostek@rwj.harvard.edu) is a Robert Wood Johnson Scholar in Health Policy Research at Harvard University. Sara McLanahan (mclanaha@princeton.edu) is the William S. Tod Professor of Sociology and Public Affairs, and Director of the Center for Research on Child Wellbeing, at Princeton University. Marcia Carlson (carlson@ssc.wisc.edu) is Associate Professor of Sociology at the University of Wisconsin-Madison. We thank seminar participants at Princeton University for very helpful comments, as well as Betsy Armstrong, Noreen Goldman, Jean Knab, Scott Lynch, Christine Percheski, and Germán Rodríguez for their input and assistance. We thank the Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD) through grants R01HD36916, R01HD39135, and R01HD40421, as well as a consortium of private foundations, for their support of the Fragile Families and Child Wellbeing Study.

Abstract

This paper uses data from the Fragile Families and Child Wellbeing Study to examine unmarried mothers' repartnering patterns. Five years after a nonmarital birth, over one-fifth of mothers were co-resident with a new partner, and many of these mothers had "traded up" in partners' human capital over time. Mothers' age, race/ethnicity, birth parity, and welfare generosity were all positively associated with repartnering. The timing of repartnering and mothers' age, race/ethnicity, employment, and family history of mental illness were all associated with trading up/down in partners' human capital. Our findings are consistent with the idea that unmarried mothers continue to search for 'good partners' after their children are born and suggest that many of these women are successful in their search.

Repartnering patterns are a crucial component of family formation processes in societies characterized by high rates of marital and (more recently) nonmarital union dissolution. Understanding these patterns is especially important in the U.S., where two-fifths of all births are to unmarried couples (NCHS 2009) and where nonmarital unions are highly unstable (Carlson, McLahanan & England 2004). Although a large body of literature has examined repartnering after a divorce, very few studies to date have examined the formation of new partnerships after a nonmarital birth.

This paper uses longitudinal data on a recent cohort of nonmarital births in large U.S. cities to examine the repartnering patterns of unmarried mothers. We focus on mothers because children typically live with their mothers after a union dissolution and thus mothers' repartnering is likely to have a more direct effect on children than fathers' repartnering. We address three primary research questions. First, how common is mothers' repartnering after a nonmarital birth? Second, how do the human capital-related characteristics of mothers' new partners compare with the characteristics of their former partners? And third, what factors predict whether mothers repartner and whether they "trade up" or "trade down" in terms of their new partners' human capital characteristics? None of these questions has been adequately addressed by prior research, and each question has important implications for policy makers as well as researchers.

BACKGROUND

How prevalent is repartnering?

The prevalence of repartnering among women who give birth outside marriage is important because of the potential long-term consequences of repartnering for mothers and children. A large literature indicates that remarriage is stressful for many divorced mothers and their

children, and there are good reasons to believe that these findings may extend to unmarried mothers and children as well (Amato, 1994; Brown, 2004; Coleman, Ganong, & Fine, 2000; Hetherington & Jodl, 1994; Hofferth, 2006; Manning & Lamb, 2003; Thomson, Hanson, & McLanahan, 1994). Estimates based on data from the 1980s find that about 1/3 of American children will live in a married or cohabiting stepfamily before age 18 (Bumpass, Raley & Sweet 1995). More recent estimates indicate that between 9 and 18 percent of children will live with a married biological mother and stepfather before reaching adulthood (Björklund, Ginther and Sundstrom 2007). We would expect these percentages to be even higher for children born to unwed mothers since nonmarital unions are very unstable, and thus many of these children are at risk for living in stepparent families (Carlson et al., 2004b; Graefe & Lichter 1999; Osborne & McLanahan 2007). Despite the importance of the question, however, we know very little about the repartnering behavior of unmarried mothers.

Previous work either fails to distinguish between unions formed with the child's biological father after a baby's birth versus those formed with other men, or focuses exclusively on new partnerships formed through marriage (thus missing the more-common cohabiting new partnerships). One study (Lundberg & Rose 2003), for example, found that just over one-fifth of mothers with a nonmarital birth prior to 1993 had married a new partner by the time their child was five years old. Another study, which did not differentiate between biological fathers and new partners, found that just under a third of women who had a first birth outside marriage in the 1990s married either their child's biological father or another man within five years of the birth (Lichter & Graefe 2001); this study attempted to exclude partnerships with biological fathers by excluding marriages that occurred within six months of the child's birth, but this approach is unlikely to exclude all such marriages. Thus, although previous empirical findings suggest that

new cohabiting and marital partnerships are fairly common among women who have children outside marriage, there are no precise estimates of the actual prevalence of such partnerships after a nonmarital birth.

How do new partners' characteristics compare with former partners' characteristics?

In addition to documenting the prevalence of repartnering, scholars have sought to compare the characteristics of first and higher-order partners. New partners' characteristics are of interest for a number of reasons. From the perspective of the individuals involved, partners' economic and psycho-social characteristics are likely to have an important impact on a family's financial and material—as well as physical and emotional—well-being. Given the fact that divorce is often associated with changes in other arenas, particularly (but not only) financial security for women and children (Ananat & Michaels 2008, McLanahan & Sandefur 1994), partners' human capital is likely to be particularly important insofar as it indicates the potential for recouping some of the financial losses incurred through divorce.

At a more theoretical level, comparing new and former partners' characteristics is of interest because of what it can tell us about the processes of mate selection in our society, and how such may differ for women in first versus higher-order unions. In this vein, scholars have studied assortative mating and partner characteristics in first and second marriages to test competing theories regarding whether higher-order marriages are better described by the "learning" hypothesis (the idea that people learn from their "mistakes" and choose "better" partners the second time around) or the "marriage market" hypothesis (the idea that the pool of potential mates and relative attractiveness to such mates are both lower as people grow older and after prior union dissolution, constraining them to settle for "worse" partners the second time around) (Gelissen 2004).

In comparing partner characteristics, researchers (e.g., Whyte 1990) have emphasized the importance of using longitudinal data to avoid the potential problem of selection bias which may occur in cross-sectional comparisons of women in first and higher order unions. For example, researchers have argued that some, but not all, of the marriage market disadvantage experienced by mothers following a nonmarital birth is due to mothers' own characteristics (selection) as opposed to the birth itself (Graefe & Lichter 2007; Qian, Lichter, & Mellott 2005). As a result, comparing across groups of mothers may not shed much light on the repartnering decisions and processes for individuals over time.

Unfortunately, only a handful of studies have had access to the longitudinal data necessary to make within-woman comparisons. Based on this literature, neither the learning nor the marriage market hypothesis has found consistent support. Dean & Gurak (1978) compared levels of marital homogamy (in terms of age, education, and religious identification) in women's first and second marriages and found that women who had been married twice experienced low levels of homogamy in both marriages. Mueller & Pope (1980) and Jacobs & Furstenberg (1986) compared the occupational status and educational attainment of women's first and second husbands, and found no evidence that second husbands were significantly different from first husbands in these measures. And finally, using longitudinal data from a sample drawn from the 1971 and 1981 British Censuses, Ni Brolchain (1988) found higher levels of both upward and downward socioeconomic mobility (in husbands' occupational status) among remarried women than among stably-married women. None of these studies was limited to women who were mothers.

To date, no researcher has used longitudinal data to compare the characteristics of *mothers*' new and former partners. However, results from cross-sectional comparisons suggest

that, for the most part, married biological fathers have higher socioeconomic capacities than mothers' new co-residential partners. For example, Hofferth and her colleagues found that married biological fathers had higher levels of education than married stepfathers and that married biological fathers worked more hours per week than cohabiting stepfathers (Hofferth 2006; Hofferth & Anderson 2003). Married biological fathers also had significantly higher earnings than stepfathers (Hofferth 2006). On the other hand, Hofferth (2006) also found that—without controlling for any other factors—unwed biological fathers had lower levels of education than cohabiting and married stepfathers.

If very little research has focused on the characteristics of mothers' new partners, even fewer studies have done so for mothers with a nonmarital birth. The few existing cross-sectional studies in this area offer a slightly more optimistic perspective on unwed mothers' new partners. One recent study, which focused on the mid-life partners of mothers who had given birth outside of marriage, found that mothers in higher-order relationships had partners with slightly higher levels of education than mothers with fewer relationships (Graefe & Lichter 2007). Although not focused specifically on partners' socioeconomic attributes, two recent studies of unwed mothers' new partners found that such men were, on average, at least as involved in parenting activities as biological fathers (Berger, Carlson, Bzostek & Osborne 2008) and that new partners' involvement was just as beneficial for children as biological father involvement (Bzostek 2008).

In summary, longitudinal evidence about remarriage provides mixed support for both the learning and the marriage market hypotheses. Although prior research has not conducted longitudinal comparisons of mothers' current and former partners, cross-sectional comparisons suggest that the mothers' new partners are, for the most part, relatively disadvantaged in terms of

socioeconomic attributes. At the same time, there is some evidence that unwed mothers who repartner may be doing so with men who play an active role in their children's lives.

What factors predict mothers' repartnering outcomes?

Understanding the factors that predict whether a mother forms a new partnership and whether her new partner represents a trade-up or a trade-down in terms of human capital characteristics is important insofar as this information may be useful in developing programs to increase the proportion of mothers who form partnerships that are likely to be stable and economically secure. Although no study has looked at this particular question, a good deal of previous research has documented the significant predictors of women's remarriage following divorce. Such studies consistently find that younger divorced women are more likely to remarry than older women (Bramlett & Mosher 2002; Bumpass, Sweet & Martin 1990; Sweeney 1997; Wu 1994) and that minority women (particularly African Americans) are less likely to remarry than white women (Bramlett & Mosher 2002). Most studies find that women with children are less likely to remarry than those without children (Buckle, Gallup & Rodd 1996; Wu 1994), but the effect of children on women's remarriage may differ depending on the age of the child (Sweeney 1997) and on women's availability to participate in work and leisure activities (De Graaf & Kalmijn 2003). Findings are mixed regarding the association between women's socioeconomic status (measured as educational attainment, occupational status and income) and remarriage (Bramlett & Mosher 2002; De Graaf & Kalmijn 2003; Shafer 2009; Smock 1990; Sweeney 1997; Wu 1994).

Some recent research on repartnering has broadened the definition of unions to include cohabitation in addition to marriage. Characteristics that predict whether a woman enters a cohabiting partnership after divorce include younger age, being non-Hispanic white or Hispanic

(versus black), and spending time in a single-parent family during childhood (Bramlett & Mosher 2002). Previous research yields conflicting results about other factors, such as religious affiliation (e.g., Bramlett & Mosher 2002 vs. Wu & Balakrishnan 1994). Research on Canadian women finds that neither the number nor age of any children in the household is significantly related to formerly married or cohabiting women's chances of repartnering through either marriage or cohabitation (Wu & Schimmele 2005).

Although studies of women's post-divorce repartnering often include the presence/number of children as control variables in their models, few studies to date have focused specifically on the repartnering behavior of *mothers*. There is, however, some evidence that the number of children from a previous marriage decreases mothers' chances of remarriage (Buckle et al. 1996), and that—consistent with the research about the predictors of remarriage among all women—younger mothers and white mothers tend to remarry more rapidly than other groups of mothers (Lundberg & Rose 2003). Researchers also find that divorced mothers with higher levels of educational attainment tend to remarry more rapidly than other mothers (Lundberg & Rose 2003).

As noted regarding the literature comparing partner characteristics, previous studies predicting *which* mothers repartner after a nonmarital birth have similarly failed to distinguish between partnerships formed with the child's biological father and those formed with other men—or have focused exclusively on remarriage, thus missing the more-common cohabiting new partnerships. Only one study to date has explicitly examined the factors predicting marriage to a new partner following a nonmarital birth (Lundberg & Rose 2003). This study—using data from the Panel Study of Income Dynamics about nonmarital births occurring prior to 1993—found that white mothers, younger mothers, mothers with at least 12 years of education, and

mothers of male children (marginally significant) were more likely than others to marry a new partner after a nonmarital birth. Birth parity was not found to be a significant predictor of marrying a new partner. In sum, although little research has focused specifically on the determinants of unmarried mothers' repartnering behaviors, evidence from related studies suggests that repartnering is likely to be associated with mothers' being young, white, and having higher levels of education.

Other predictors and control variables

In addition to the variables described above, prior research has identified a number of factors that are associated with family formation and stability more broadly and that are likely to be associated with repartnering among unmarried mothers. These factors include mothers' attitudes toward marriage and gender relationships (Carlson et al., 2004b), nativity status, and child's health (Reichman, Corman & Noonan 2004). City-level contextual variables such as welfare generosity, the strictness of the child support system and labor market characteristics have also been shown to be associated with family formation (Carlson et al., 2004a; Harknett & McLanahan 2004; Knab et al. 2008).

Finally, we include variables that measure the number of years the mother was not living with either the child's biological father or a new partner and whether the mother's own mother (the focal child's grandmother) ever exhibited symptoms of depression or anxiety. The first variable is intended to control for the amount of the time a mother is 'at risk' for repartnering. The second variable is viewed as a proxy for the mother's own predisposition to anxiety and/or depression and is utilized to control for unobserved characteristics of the mother that may be correlated with other variables and repartnering.

METHOD

Data

We use data from the Fragile Families and Child Wellbeing Study, a longitudinal survey of 4,898 children (3,710 of whom were born to unwed parents) born in 20 large U.S. cities between 1998 and 2000. The survey interviewed children's biological mothers and fathers at the time of the child's birth and approximately one, three, and five years after the birth. When weighted, the data are nationally representative of all births as well as all unmarried births in large cities during this period. (See Reichman et al. [2001] for more information about the survey design).

Our analyses are all based on the sample of mothers with nonmarital births. We first describe mothers' living arrangements (including the prevalence of new partnerships) at each of the survey waves. At every wave, we base this information on the full sample of unwed mothers who were living with the focal child and had valid information about their living arrangements (this includes 3,700 mothers in the baseline survey, 3,200 mothers one year after the birth, 3,079 mothers three years after the birth, and 2,999 mothers five years after the focal child's birth.)

After describing all unwed mothers' living arrangements through the survey period, we then focus specifically on the sample of mothers who were not living with the focal child's biological father and were thus at-risk for forming a new partnership in at least one of the post-birth survey waves. Nineteen percent of this potential sample of 2,468 mothers was dropped from our models due to missing data on one or more of the independent variables, resulting in an analytic sample for the regression models of 2,016 mothers. Mothers with missing data on partners' characteristics were dropped from the models that predicted the particular characteristic that was missing, ranging from 11.5 percent of cases missing data about partners' incarceration

history to 20 percent missing data about partners' employment status. Mothers were not asked about new partners' employment status at the one-year interview, but this information was available through the household roster for approximately three-quarters of mothers in new partnerships at the one year survey. Because the survey did not ask mothers about new partners' education at the one-year interview, the models predicting partner education use imputed data at that wave rather than dropping all these mothers from the analysis. These data were imputed through multiple regression techniques using the "proc mi" command in SAS. Because the data being imputed were missing by design, we assume that these data are 'missing at random' and can be appropriately imputed using multiple imputation techniques. We also estimated models that excluded the mothers who repartnered at one year and the results were similar.

Measures

Relationship status was measured using mothers' reports at each of the post-baseline waves. Mothers who reported living with the child's biological father all, most or some of the time were considered to be co-resident with the child's father. Mothers who reported living in a cohabiting or marital partnership with another male partner were coded as living with a new partner, and mothers who reported living with neither the child's father nor a new male romantic partner were coded as single. We considered three measures of partners' human capital characteristics: incarceration history (whether partner had ever been incarcerated); employment status (whether he was working in the past week); and educational attainment (<HS diploma or GED only; high school diploma; and some college or more). Biological fathers' characteristics were measured in several different ways, including the mother's report at the time of child's birth and the mother's report at the time she was first observed with a new partner (referred to as the

"current wave"); where available, we also used the father's own report, measured either at the time of the child's birth or at the time of mother's repartnering.

To avoid potential problems of reverse-causality, the covariates were measured (using mothers' reports) at the time of the child's birth or at the time of the survey wave immediately preceding the wave in which the outcome was measured. Dummy variables for the survey wave (one, three or five years post-birth) were used to measure child's age (i.e., time elapsed since birth). Note that although many mothers did not live with the child's biological father at the time of the child's birth, risk of repartnering was assumed to begin one year after the child's birth because mothers were not asked about new partnerships in the baseline survey. Mothers' age was measured in years at the time of the child's birth. Race/ethnicity was represented by a set of dummy variables for non-Hispanic white or other (mostly Asian), non-Hispanic black and Hispanic. Nativity status was measured as whether or not the mother was born outside the US. Mothers' health was measured as a dummy variable for whether her health was "fair or poor" versus "excellent, very good, or good." Child characteristics included indicators for the child being male, born at a low/very low birth weight (less than 2500g), and whether the focal child was the mother's first birth. Grandmothers' symptoms of depression were derived from the National Co-morbidity Survey (NCS), based on an adaptation by Ron Kessler to the Composite International Diagnostic Interview (CIDI). We used grandmothers' mental health rather than mothers' mental health because the latter may be endogenous to mothers' repartnering decisions.

Measures of mothers' attitudes include whether the mother strongly agreed or agreed with the statements that "single mothers can raise children as well as two parents" and "men cannot be trusted to be faithful" (measured at the time of child's birth). Religiosity was measured as whether the mother attended religious services at least monthly (measured at the previous

survey wave), and family structure background was measured as whether the mother lived with both of her biological parents at age 15. Mothers' economic characteristics included educational attainment (measured at the time of child's birth), an indicator for whether the mother obtained additional schooling after the child's birth, and whether the mother was employed in the preceding survey wave.

Finally, welfare generosity, labor market strength and child support enforcement were coded as high, moderate, or low. Welfare and child support were measured at the state level whereas labor market strength was measured at the county level. See Reichman et al. (2001) for more information about these definitions and the Fragile Families sampling design.

Analytic strategy

After describing mothers' living arrangements and conducting mean comparisons of new and former partners' human capital, we use a nested modeling approach to model mothers' repartnering behaviors. Our modeling strategy is based on the theoretical assumption that mothers first decide to repartner and then second, they choose a particular mate. To model this process we use discrete-time event history logistic regression to first model whether a mother forms a new partnership and then basic logistic regression to model whether she "trades up" or "trades down." The discrete-time modeling strategy enables us to include mothers in the sample who were not interviewed in all survey waves and to incorporate both the child's age and the mother's duration of eligibility, as well as time-varying covariates, into the predictions of which mothers repartnered. Mothers were considered to have "traded up" if the child's biological father exhibited a negative characteristic (e.g., not employed) and the new partner exhibited the opposite characteristic (e.g. employed). Similarly, mothers were considered to have "traded down" if the child's biological father exhibited a positive characteristic and the new partner

exhibited the opposite characteristic. Note that it is possible that a mother could "trade up" on one partner characteristic and "trade down" on another. The standard errors in all models were adjusted for the city clustering in the Fragile Families data. The data for these analyses were transformed into person-waves, with mothers contributing one observation each survey wave they were at-risk for forming a first new partnership (i.e., were not living with the focal child's biological father and had not previously repartnered). Our sample of 2,016 individual mothers contributes a total of 4,030 person-year observations. Separate models were run for each father/partner characteristic—incarceration history, employment, and educational attainment. We also ran multinomial discrete-time logistic regression models to predict repartnering and trading up/trading down in one step, based on the alternative assumption that mothers *simultaneously* decide whether and with whom to repartner. We briefly describe these results, which were largely similar to those from the nested models, in the Results section below.

For each of the regression models predicting trading up and trading down in a given partner characteristic (incarceration history, employment, education), the sample of mothers was first stratified by the biological fathers' characteristics, essentially dividing the sample of mothers into two dichotomous groups: mothers who were first partnered with men with negative attributes (those eligible for trading up through repartnering) and mothers who were first partnered with men with positive attributes (those eligible for trading down through repartnering). This stratification strategy both aids in the interpretation of the results and reflects previous research (see, for example, Ananat & Michaels 2008), demonstrating that conclusions drawn from mean effects may blur important distinctions within the distribution of outcomes.

Comparing characteristics of the same mothers' partners over time avoids selection bias in time-invariant maternal characteristics that may select particular groups of mothers into

partnerships with certain types of men. While the models presented are not fixed effect models per se, they are similar in nature, since fixed maternal characteristics would equally affect mothers' original and new partnerships and therefore cannot be responsible for differences observed in mothers' sequential partnerships. Maternal characteristics that could change over time (such as mothers' health, employment and education), however, could still be problematic in these longitudinal models. The regression models control for such time-varying characteristics, using reports from the wave prior to the outcome to avoid the potential problem of reverse-causality.

RESULTS

Our first question asks about the prevalence of mothers' new partnerships following a nonmarital birth. Table 1 provides estimates of mothers' partnership status at each of the post-birth waves. One year after a nonmarital birth, five percent of mothers were living with a new partner, 53 percent were living with the focal child's biological father, and 43 percent were single (not living with a romantic partner). Three years after the birth, 12 percent of all mothers with unmarried births were living with a new partner, 45 percent were living with the focal child's biological father, and 43 percent were single. Finally, five years after the birth, just over one-fifth of the mothers were living with a new partner, slightly under two-fifths were living with the focal child's biological father, and about two-fifths were single. The table also indicates the proportion of mothers who were ever living with a new partner. Five percent of mothers had repartnered by their child's first birthday, 14 percent had done so by the child's third birthday, and 27 percent had done so by the child's fifth birthday. Among mothers who were living apart from the child's biological father in at least one of the post-birth survey waves—and were thus

truly at-risk for forming a new partnership (i.e., our analytic sample of 2,468 mothers)—just under two-fifths (36%) had repartnered with a new man (figure not shown in table).

Marital versus cohabiting partnerships

As indicated in Table 1, cohabitation was more common than marriage in the years following a nonmarital birth for mothers living with a new partner or with the child's biological father. Less than one-quarter of the mothers living with new partners were married to these partners at each of the post-birth waves. And although the proportion of co-residential biological parents who were married increased across the survey waves, more than half of these couples were still unmarried at the child's fifth birthday.

Three points about the data should be noted. First, because the data about mothers' partnerships were gathered at three snapshots in time after the child's birth rather than through exhaustive partnership histories, these data almost certainly miss some partnerships that formed and dissolved between the survey waves. For this reason, we consider our estimates to be a lower bound of the percentage of mothers forming new co-residential partnerships in the years immediately following a nonmarital birth. Second, approximately nine percent of mothers reported living with a "new partner" (i.e., a man other than the focal child's biological father) in more than one consecutive wave. Because it is unclear from the available information how many of these mothers were living with the same new partners at more than one wave and how many formed one new partnership and then broke up with that partner and formed another co-residential partnership, the analyses discussed below focused exclusively on the *first* time a mother was observed in a new co-residential partnership after a nonmarital birth. Finally, because preliminary analyses did not identify important differences in the patterns under

investigation by partners' marital status, we do not distinguish in subsequent analyses between new partnerships formed through marriage and those formed through cohabitation.

Table 2 presents descriptive results for the sample of mothers who were at-risk for forming a first new partnership, by living away from the child's biological father, in at least one of the survey waves (n=2,016). This is the sample of interest for our subsequent analyses predicting mothers' repartnering patterns. As shown in Table 2, nearly two-thirds of these mothers were not living with their child's biological father at the time of the baby's birth. The majority of the sample (63 percent) was non-Hispanic black, 22 percent was Hispanic, and about 16 percent was non-Hispanic white and other (mostly Asian). Nearly half of the sample had either not finished high school or had only a GED, and approximately four-fifths were employed in the year prior to the focal child's birth.

New partners' characteristics

Our second research question asks how the characteristics of mothers' new partners compare with the characteristics of children's biological fathers (the mothers' former partners). Table 3 focuses on the sample of mothers observed in a first new partnership, and presents means for partners' incarceration history, employment status, and educational attainment. The findings demonstrate that across all three characteristics, mothers' new partners compared favorably with former partners. For example, the proportion of new partners who had never been incarcerated was between 13 and 45 percentage points higher than for original partners (depending on the reporter and survey wave of report). The percentage of new partners who were employed was between 10 and 26 percentage points higher than the equivalent percentage for former partners. And while less than one-fifth of new partners did not have a high school diploma, approximately half of mothers' former partners fell into this category. The only case in

which new partners' characteristics were not consistently better than former partners' characteristics was college attendance, for which the differences were not always statistically significant (but favored the new partner when significant).

The relative advantage of new partners' characteristics could conceivably result from new partners being older than the biological fathers at the time of partnership formation and having had, as a result, more time to complete their education and obtain employment. Although it is true that mothers' new partners were, on average, older than the children's biological fathers were at the time of the child's birth, this is not a likely explanation for the finding that new partners' characteristics were often better than those of the children's fathers. Both mothers and the biological fathers themselves reported *lower* levels of employment among biological fathers at the current interview (i.e., when they were older) than at the time of the child's birth. And even when new partners' education was compared with biological fathers' own reports about their education from the current interview, the significant differences identified always favored the new partners. Finally, the proportion of biological fathers who had never been incarcerated could only decrease over time.

The patterns identified above were consistent regardless of whether mothers' reports about the former partners or the former partners' own reports about themselves (when available) were used. The magnitude of the differences, however, varied considerably by reporter, with former partners' own reports almost always being more favorable than the mothers' reports when such differences were identified. Differences in parental reports were especially large in the case of paternal incarceration, with biological fathers reporting a far lower prevalence than mothers. The percentage-point differences in mothers' and biological fathers' reports of incarceration and employment increased from the baseline survey to the current wave, mostly because of changes

in mothers' reports across waves. It is possible that mothers did not truthfully answer questions about the biological fathers at the baseline interview, when many of the mothers were still romantically involved with the fathers; this would imply that mothers could also be under-reporting problems of their current partners, magnifying the differences observed between the two groups. Alternatively, mothers may have seen the biological fathers in a more negative light after breaking up with them either because of acrimony during the dissolution process or because they gained a more objective perspective about the fathers with the passage of time.

Since mothers' reports about their former partners tended to worsen over time, in order to minimize potential negative reporting bias, the remaining analyses in the paper used mothers' reports about the biological fathers taken from the earliest wave possible for employment status and incarceration history; in other words, this gave biological fathers the 'best chance' of a favorable comparison. Biological fathers' education was based on mothers' reports at the time of the child's birth and updated using the biological fathers' own current reports when available to account for the possibility that fathers returned to school after the child's birth (mothers were not asked to update their reports of the biological fathers' education after the child's birth).

It is also possible that Table 3 is "comparing apples and oranges," since we were comparing the characteristics of co-resident new partners with those of biological fathers, regardless of whether the fathers ever lived with the child's mother. If mothers are particularly selective in choosing co-residential mates, then a more appropriate comparison would be between mothers' new co-resident partners and formerly-co-resident biological fathers. Results from such comparisons (not shown) confirmed both the hypothesis that mothers are more selective in choosing co-resident partners (i.e., the reports about the previously-*co-resident* biological fathers were often better than those for the total sample of biological fathers) as well

as the patterns identified in Table 3. Even limiting the sample to mothers who co-resided with the child's biological father, new partners compared favorably in all domains--although the magnitude of the differences were sometimes smaller in this case. Because the results were substantively consistent across the two sample definitions (mothers who lived with the biological fathers and mothers who did not) and because we were interested in understanding how all unwed mothers fared in repartnering, the subsequent analyses in the paper are based on the entire sample of mothers who repartnered.

The mean differences reported in Table 3 reflect how mothers' new and former partners compared overall, without providing information about the exact proportions of mothers who "traded up" or "traded down" when they repartnered. This descriptive information is presented in Table 4. In some cases, the totals presented in this figure are slightly different from the estimates presented in Table 3; this is because Table 3 is not limited to cases in which reports were available about both new partners and biological fathers.

As indicated in Table 4, thirty-five percent of mothers who repartnered "traded up" in partners' incarceration status, moving from a partner who had been incarcerated to a new partner who had never been incarcerated. Among the 48 percent of mothers originally partnered with biological fathers who had been incarcerated (those who were truly "eligible" to trade up), 73 percent did so (35.1/47.9). On the flipside, nine percent of mothers "traded down" in partners' incarceration history when they repartnered, moving from a never-incarcerated biological father to a new partner with an incarceration history. Among those eligible for trading down, 17 percent did so (9.0/52.1). Less than half of the mothers who repartnered (43 percent) were with never-incarcerated men both times, and approximately 13 percent of the mothers were partnered with both biological fathers and new partners who had been incarcerated.

About 61 percent of mothers who repartnered had employed partners at both times. Just under one-quarter of mothers who repartnered traded up in terms of partners' employment status. Among the 29 percent of mothers with non-working biological fathers, 79 percent traded-up when they repartnered. At the other end, 10 percent "traded down," moving from an employed biological father to a non-working new partner. Among those eligible for trading down, 15 percent did so.

Finally, slightly under half of mothers who repartnered did so with a man with more education than their child's biological father (60 percent among those "eligible" to trade up in partner education). Approximately one-fifth of mothers who repartnered did so with a man with less education than their former partner (43 percent among those "eligible" to trade down in partner education), and around one-third of mothers repartnered with a man with the same level of education as the child's biological father.

Predicting mothers' repartnering and trading up/trading down

Our final research question asks which factors predict whether a mother repartners with a new man and which factors predict whether she trades up or trades down. Tables 5 and 6 present the results from models first predicting which mothers repartnered and then, conditional on having repartnered, which mothers traded up and which traded down. Table 5 displays odds ratios from a discrete-time logit model predicting which mothers formed a new co-residential partnership within five years after a nonmarital birth. The sample for this analysis was mothers who were at risk of forming a first new co-residential partnership, with mothers contributing one observation to the dataset each post-birth survey wave they were not living with the child's father and had not previously repartnered. Table 6 then presents results from basic logistic regression models predicting trading up and trading down among the mothers who repartnered.

Each column in the table represents a separate model, and in every model the omitted outcome category is the new partner having the same attribute as the child's biological father.

The results in Table 5 suggest that child's age and the number of waves a mother was at risk of repartnering were both significantly and positively associated with the odds of repartnering in the five years after a nonmarital birth. Consistent with previous research predicting women's repartnering behaviors, the results also show that white mothers and younger mothers had significantly higher odds of repartnering. The odds of being in a new partnership were more than thirty percent higher for white mothers than for Hispanic and non-Hispanic black mothers, and each additional year of maternal age was associated with a reduction of eight percent in the odds of repartnering.

Although mothers' baseline educational attainment was not significantly related to repartnering, the odds of repartnering were approximately 30 percent lower for mothers who obtained additional education after the child's birth. Mothers for whom the focal child's birth was their first birth had odds of repartnering that were 35 percent lower than mothers with higher-order births. Finally, mothers living in areas with highly generous welfare benefits had odds of repartnering that were about three-quarters those of mothers living in areas with low welfare generosity. All three of these findings (lower odds of repartnering for mothers going back to school, those with no prior children, and those living in areas with relatively generous welfare benefits) suggest that economic considerations were likely an important factor in mothers' decisions, since these mothers presumably faced fewer financial burdens—and thus less financial pressure to repartner—than their counterparts. None of the other variables—including the child's characteristics, mother's background characteristics, and the mothers' relationship

attitudes—was found to be a significant predictor of the odds of repartnering in the years after a nonmarital birth.

Table 6 displays the results from the models predicting trading up and trading down in partners' human capital among the mothers who repartnered. In terms of the timing, the results suggest that mothers who waited longer to repartner were less likely to trade down and more likely to trade up in partners' incarceration history. The timing of repartnering was not significantly related to trading up/down in partners' employment status. In terms of partners' college (but not high school) education, mothers who repartnered early were significantly less likely to trade down than mothers who repartnered late.

Although the model predicting repartnering indicated that older mothers were less likely to repartner, the models predicting trading up/down suggested that when older mothers did repartner, they were marginally less likely to trade down in partners' employment status and significantly more likely to trade up in partners' college education. Black and Hispanic mothers were significantly more likely than white mothers to trade down in partners' incarceration status, and black mothers were significantly less likely to trade up. Given high rates of racial homogamy in romantic relationships and high levels of incarceration among minority (especially black) men, this finding likely reflects racial disparities in the available pool of never-incarcerated men. Black mothers were also significantly more likely than white mothers to trade down in partners' employment status. Hispanic mothers were less likely than other mothers to be partnered with a man with at least a high school diploma, regardless of the biological father's educational attainment. Mothers who reported fair or poor health were significantly more likely to trade down in partners' incarceration history and employment status, and mothers who reported a family history of mental illness were more likely to trade down and less likely to trade up in

partners' incarceration and employment status. The coefficients for maternal attitudinal factors were either not significant or inconsistent across outcomes.

Although the model predicting repartnering found that mothers who returned to school were less likely to repartner, the results predicting trading up/trading down indicated that mothers who obtained additional education after the child's birth and then repartnered tended to do so with better-educated men. Mothers who were employed were significantly less likely to repartner with a previously-incarcerated man, regardless of the biological fathers' incarceration history.

Finally, although the model predicting repartnering found that mothers living in areas with generous welfare benefits were less likely to repartner, the results in Table 6 suggest that when such mothers did repartner, they were more likely than other mothers to repartner with never-incarcerated men. On the other hand, mothers living in strong labor markets were less likely to repartner with never-incarcerated men.

Alternative modeling specification: Simultaneous decisions

In addition to the models described above (which assumed that mothers make decisions regarding whether and with whom to repartner sequentially), we also used a second modeling strategy to test the robustness of our results to the alternative assumption that mothers *simultaneously* decide whether and with whom to repartner. Here, we used multinomial discrete-time logistic regression models to predict whether mothers traded up or traded down, versus not repartnering at all. The multinomial discrete-time logit model has been used in previous research about assortative mating in remarriage (see, e.g., Shafer 2009), and is similar to a hazard analysis in which cases can "die" from multiple causes. (See Yamaguchi [1990] for a detailed discussion

of this model.) As was true for the first strategy, the discrete-time modeling strategy allowed us to account for a mother's duration at-risk and to incorporate time-varying covariates.

The results from the multinomial models (available upon request) largely confirmed the results from the nested models. As before, the multinomial models identified certain groups of mothers (older mothers, non-white mothers, mothers with first births, and mothers who obtained additional education) as less likely than other mothers to repartner. Both modeling strategies also demonstrated that mothers who waited longer to repartner tended to do so with men with better attributes. In a few cases, however, the two modeling strategies provided different information. Whereas the nested models showed that although older mothers, mothers who obtained additional education, and mothers living in areas with generous welfare benefits were less likely to repartner, when they did so, they tended to repartner with relatively "attractive" men, these findings were far less clear in the multinomial models. Furthermore, in a couple of cases, the multinomial models identified stronger associations between the predictor variables (e.g., familial mental illness and city-level welfare generosity) and mothers trading up on partners' education than the nested models.

DISCUSSION

The dramatic increase in nonmarital childbearing in recent decades signifies a shift in the sequence of family formation patterns for many individuals—particularly among minority and lower socioeconomic groups—from marriage followed by childbearing to having children first and then continuing to search for a spouse (Bumpass 1990; Cherlin 2009; Ellwood & Jencks 2004). Rising rates of maternal employment and increased normative acceptance of single motherhood have reduced some of the costs to unwed mothers of remaining single longer.

Unwed mothers' opportunities for repartnering, however, may be constrained by increasing employment instability and declining wages at the bottom of the male wage distribution (Blank 1997; Oppenheimer 1998, 2000; Wilson 1987), which have likely reduced the pool of men that single mothers deem good partners. Research also suggests that nonmarital births disadvantage mothers on the relationship market (Qian et al. 2005; Graefe & Lichter 2007).

Previous empirical research provides relatively little information about mothers' repartnering behaviors after a nonmarital birth. This paper used data from the Fragile Families and Child Wellbeing Study to document the prevalence of mothers' new co-residential partnerships, to compare the human capital of mothers' new and former partners, and to predict which groups of mothers are the most likely to repartner and to "trade up" or "trade down" in partners' characteristics. We found that that 27 percent of unwed mothers formed cohabiting or marital partnerships with new partners by the focal child's fifth birthday, and that around two-fifths of the mothers who were single in at least one survey wave (and therefore at risk for forming a new partnership) repartnered. As expected, cohabiting new partnerships were more common than marital partnerships soon after a nonmarital birth.

On average, mothers who repartnered tended to do so with men with higher levels of human capital relative to their former partners. Among mothers who were eligible to "trade up," 73 percent did so in partners' incarceration status, 79 percent did so in partners' employment status, and 60 percent did so in partners' educational attainment. These proportions are much higher than the percentage of eligible mothers who "traded down." The finding that, on average, mothers' new partners compared favorably to their former partners was robust to using either the mothers' reports about the biological fathers' characteristics or the biological fathers' own reports about themselves, and to the choice of which survey wave was used to measure

biological fathers' characteristics. These findings are in line with ethnographic work by Edin and colleagues (Edin & Kefalas 2005; Gibson-Davis, Edin, & McLanahan 2005) which suggests that unwed mothers have high standards for their new partners and may choose to remain single unless/until they find partners who meet these expectations.

Our models predicting which groups of mothers repartnered also confirmed findings from previous research suggesting that younger women and white women (and mothers specifically) are more likely than their counterparts to repartner (Bramlett & Mosher 2002; Lundberg & Rose 2003; Sweeney 1997; Wu 1994). Taken together, the factors found to predict repartnering provide fairly strong support for the argument that economic need and independence are driving factors in mothers' repartnering decisions. In particular, mothers having a first birth, mothers who returned to school after child's birth, and mothers living in areas with generous welfare benefits had significantly lower odds of repartnering. All of these factors increase mothers' economic independence (relative to other mothers) and reduce the need to find a new partner (Oppenheimer 1988).

At a more theoretical level, our research confirms the relevance of both the marriage market and learning hypotheses for this sample of women and suggests that the two processes are not necessarily mutually exclusive. Many of the mothers who repartnered traded up in their partners' human capital, which is clear support for the learning hypothesis. At the same time, the mothers who were the most likely to repartner were those who were relatively "attractive" to potential mates and those who could afford to be more "choosy" in searching for and selecting a new mate, which is consistent with the marriage market hypothesis. Although the women's prospects may be more limited due, in part at least, to their nonmarital birth (Qian et al. 2005), increased selectivity following a nonmarital birth may be leading to a situation in which fewer

women are repartnering; indeed, the majority of the mothers "at risk" for repartnering did not form a new co-residential partnership in the five years after the focal child's birth.

Limitations

Despite providing new information about a relatively understudied—but important and growing—group of mothers, our analyses have some limitations. As previously noted, because the Fragile Families Study collected information about mothers' partnerships at several points in time rather than exhaustive partnership histories, our analyses are likely missing some (relatively short-lived) partnerships that formed and dissolved in between survey waves. For this reason, our estimates represent a lower bound of the proportion of mothers repartnering after a nonmarital birth. This could have important implications for our findings about new partners' characteristics, since the longest-lasting new partnerships observed in the study are likely to involve partners with the "best" characteristics. Future research on this topic would greatly benefit from collecting more information about mothers' relationship patterns and transitions in-between survey waves.

Our results clearly demonstrate that the mothers who repartnered after a nonmarital birth tended to do so with relatively attractive men (in terms of their human capital, at least). However, because all of the information about partners' characteristics was, by necessity, taken from mothers who were in relationships with new partners, it is not possible to draw broader conclusions about how the mothers who did *not* repartner would have fared in terms of partner characteristics had they repartnered. It is possible, for example, that the mothers who repartnered within five years of the birth were the most motivated to find suitable new partners, and that the mothers who enter new partnerships in later years would repartner with less "attractive" men. Alternatively, mothers who wait longer to repartner may use the additional search time to find

mates with even more desirable attributes. Although the data used here cannot adjudicate between these two possibilities, the finding that mothers who waited longer to repartner tended to do so with men with higher levels of human capital is suggestive.

Despite these limitations, our analyses represent an important step forward in understanding unwed mothers' post-birth repartnering behaviors. Our findings suggest that many mothers and their children live with new partners soon after the children's births and that mothers in the most economic need are the most likely to form new co-residential partnerships in the years after a nonmarital birth. The results from our comparisons of new and former partners' human capital confirm qualitative evidence suggesting that unmarried mothers care a great deal about finding a good mate for themselves and a potential father-figure for their children (Edin & Kefalas 2005), and our findings indicate that many mothers appear to be successful in that search. There are, however, many unwed mothers who did not repartner in the five years after a nonmarital birth. It remains unclear to what extent the findings described here will apply to these mothers if and when they form new relationships. This will be an important question to be addressed by future research in this area.

Amato, P. (1994). The implications of research findings on children in stepfamilies. In A. Booth & J. Dunn (Eds.), *Stepfamilies: Who benefits? Who does not?* (pp. 81 - 87). Hillsdale, NJ: Lawrence Erlbaum.

Ananat, E., & Michaels, G. (2008). The effect of marital breakup on the income distribution of women with children. *Journal of Human Resources, 43*, 611-629.

Berger, L., Carlson, M., Bzostek, S., & Osborne, C. (2008). Parenting practices of resident fathers: The role of marital and biological ties. *Journal of Marriage and Family, 70*, 625-639.

Björklund, A., Ginther, D.K., & Sundstrom, M. (2007). Family structure and child outcomes in the USA and Sweden. *J. Popul. Econ, 20*, 183-201.

Blank, R.M. (1997). *It takes a nation: A new agenda for fighting poverty*. New York: Russell Sage Foundation, and Princeton, NJ: Princeton University Press.

Bramlett, M., & Mosher, W. (2002). Cohabitation, marriage, divorce, and remarriage in the United States. National Center for Health Statistics (NCHS). *Vital and Health Statistics Reports, 23*.

Brown, S. (2004). Family structure and child well-being: The significance of parental cohabitation. *Journal of Marriage and Family, 66*, 351 - 367.

Buckle, L., Gallup Jr., G., & Rodd, Z. (1996). Marriage as a reproductive contract: Patterns of marriage, divorce and remarriage. *Ethology and Sociobiology, 17*, 363-377.

Bumpass, L. (1990). What's happening to the family? Interactions between demographic and institutional change. *Demography, 27*, 483-498.

Bumpass, L., Raley, K., & Sweet, J. (1995). The changing character of stepfamilies: Implications of cohabitation and nonmarital childbearing. *Demography, 32*, 425-436.

Bumpass, L., Sweet, J., & Martin, T. (1990). Changing patterns of remarriage. *Journal of Marriage and the Family, 52*, 747-56.

Bzostek, S. (2008). Social fathers and child well-being. *Journal of Marriage and Family, 70*, 950-961.

Carlson, M., Garfinkel, I., McLanahan, S., Mincy, R., & Primus, W. (2004a). The effects of welfare and child support policies on union formation. *Population Research and Policy Review, 23*, 513-542.

Carlson, M., McLanahan, S., & England, P. (2004b). Union formation in fragile families. *Demography, 41*, 237-262.

Cherlin, A. (2009). *The marriage-go-round: The state of marriage and the family in America today*. New York, NY: Alfred A. Knopf.

Coleman, M., Ganong, L., & Fine, M. (2000). Reinvestigating remarriage: Another decade of progress. *Journal of Marriage and the Family, 62*, 1288 - 1307.

Dean, G., & Gurak, D. (1978). Marital homogamy the second time around. *Journal of Marriage and the Family, 40*, 559-570.

De Graaf, P., & Kalmijn, M. (2003). Alternative routes in the remarriage market: Competing-risk analysis of union formation after divorce. *Social Forces, 81*, 1459-1498.

Edin, K., & Kefalas, M. (2005). *Promises I can keep: Why poor women put motherhood before marriage*. Los Angeles, CA: University of California Press.

Ellwood, D., & Jencks, C. (2004). The spread of single-parent families in the United States since 1960. Harvard University Faculty Research Working Papers Series, RWP04-008.

Gelissen, J. (2004). Assortative mating after divorce: A test of two competing hypotheses using marginal models. *Social Science Research, 33*, 361-384.

Gibson-Davis, C., Edin, K., & McLanahan, S. (2005). High hopes but even higher expectations: The retreat from marriage among low-income couples. *Journal of Marriage and the Family, 67*, 1301-1312.

Graefe, D., & Lichter, D. (1999). Life course transitions of American children: Parental cohabitation, marriage and single motherhood. *Demography, 36*, 205-217.

------. (2007). When unwed mothers marry: The marital and cohabiting partners of midlife women. *Journal of Family Issues, 28*, 595-622.

Harknett, K., & McLanahan, S. (2004). Racial and ethnic differences in marriage after the birth of a child. *American Sociological Review, 69*, 790-811.

Hetherington, E., & Jodl, K. (1994). Stepfamilies as settings for child development. In A. Booth & J. Dunn (Eds.) *Stepfamilies: Who benefits? Who does not?* (pp 55-79). Hillsdale, NJ: Lawrence Erlbaum Associates.

Hofferth, S. (2006). Residential father family type and child well-being: Investment versus selection. *Demography, 43*, 53-77.

Hofferth, S., & Anderson, K. (2003). Are all dads equal? Biology versus marriage as a basis for paternal investment. *Journal of Marriage and the Family, 65*, 213-232.

Jacobs, J., & Furstenberg, F. (1986). Changing places: Conjugal careers and women's marital mobility. *Social Forces, 64*, 714-732.

Knab, J., Garfinkel, I., McLanahan, S., Moiduddin, E., & Osborne, C. (2008). The effects of welfare and child support policies on the incidence of marriage following a nonmarital birth. Center for Research on Child Wellbeing Working Paper 2007-10-FF.

Lichter, D., & Graefe, D. (2001). Finding a mate? The marital and cohabitation histories of unwed mothers. In L. Wu & B. Wolfe (Eds.), *Out of wedlock: Causes and consequences of nonmarital fertility (*pp. 317-343). New York, NY: Russell Sage Foundation.

Lundberg, S., & Rose, E. (2003). Child gender and the transition to marriage. *Demography, 40*, 333-349.

Manning, W., & Lamb, K. (2003). Adolescent well-being in cohabiting, married and single-parent families. *Journal of Marriage and Family, 65*, 876 - 893.

McLanahan, S., & Sandefur, G. (1994). *Growing up with a single parent: What hurts, what helps.* Cambridge, MA: Harvard University Press.

Mueller, C., & Pope, H. (1980). Divorce and female remarriage mobility: Data on marriage matches after divorce for White women. *Social Forces, 58*, 726-738.

National Center for Health Statistics. (2000-2009). *National vital statistics reports*, volumes 48(16), 49(1), 50(5), 51(2), 52(10), 54(2), 55(1), 56(6), 57(12). Accessed online at http://www.cdc.gov/nchs/births.htm.

Ni Brolchain, M. (1988). Changing partners: A longitudinal study of remarriage. *Population Trends, 53*, 27-34.

Oppenheimer, V. (1988). A theory of marriage timing. *American Journal of Sociology, 94*, 563-591.

------. (2000). The continuing importance of men's economic position in marriage formation. In L. Waite (Ed.), *The ties that bind: Perspectives on marriage and cohabitation* (pp. 283-301). New York: Aldine de Gruyter.

Osborne, C., & McLanahan, S. (2007). Partnership instability and child wellbeing. *Journal of Marriage and Family, 69*, 1065-1083.

Qian, Z., Lichter, D., & Mellott, L. (2005). Out of wedlock childbearing, marital prospects and mate selection. *Social Forces, 84*, 473-491.

Reichman, N. E., Corman, H., & Noonan, K. (2004). Effects of child health on parents' relationship status. *Demography, 41*, 569-584.

Reichman, N., Teitler, J., Garfinkel, I., & McLanahan, S. (2001). Fragile families: Sample and design. *Children and Youth Services Review, 23*, 303-326.

Shafer, K. (2009). *Gender differences in remarriage: Marriage formation and assortative mating after divorce*. Unpublished doctoral dissertation, The Ohio State University.

Smock, P. (1990). Remarriage patterns of Black and White women: Reassessing the role of educational attainment. *Demography, 27*, 467-473.

Sweeney, M. (1997). Remarriage of women and men after divorce: The role of socioeconomic prospects. *Journal of Family Issues, 18*, 479-502.

Thomson, E., Hanson, T., & McLanahan, S. (1994). Family structure and child well-being: Economic resources vs. parental behaviors. *Social Forces, 73*, 221-242.

Whyte, M. (1990). *Dating, mating and marriage*. New York, NY: Aldine de Gruyter.

Wilson, W.J. (1987). *The truly disadvantaged: The inner city, the underclass, and public policy*. Chicago, IL: University of Chicago Press.

Wu, Z. (1994). Remarriage in Canada: A social exchange perspective. *Journal of Divorce and Remarriage, 21*, 191-224.

Wu, Z., & Balakrishnan, T. (1994). Cohabitation after marital disruption in Canada. *Journal of Marriage and the Family, 36*, 723-34.

Wu, Z., & Schimmele, C. (2005). Repartnering after first union disruption. *Journal of Marriage and the Family, 67*, 27-36.

Yamaguchi, K. (1990). Logit and multinomial logit models for discrete-time event-history analysis: A causal analysis of interdependent discrete-state processes. *Quality and Quantity, 24*, 323-341.

Table 1. Mothers' romantic relationships following a nonmarital birth[a]

	Baseline	One year	Three years	Five years
Living with focal child's biological father (%)	**51.2**	**52.9**	**44.7**	**37.6**
Married	0.0	11.0	15.5	16.6
Cohabiting	51.2	41.9	29.2	21.0
Living with new partner (%)	NA	**4.7**	**12.3**	**21.6**
Married	NA	1.1	1.2	4.9
Cohabiting	NA	3.6	11.1	16.7
Not living with partner (%)[b]	**48.8**	**42.5**	**43.0**	**40.8**
Total	**100.0**	**100.0**	**100.0**	**100.0**
Ever repartnered by survey wave (%)	**NA**	**4.7**	**13.8**	**26.6**
Unweighted N	3,710	3,200	3,079	2,999
Weighted N	2,366	2,055	1,960	1,899

Notes: NA: Not available. Percentages are weighted by national sampling weights.

[a]The sample includes all unwed mothers living with the focal child at least half-time.

[b]Since mothers were not asked about romantic relationships with new partners at baseline, some of the women included in this category could be in romantic relationships with new partners. Information from the household roster at baseline suggests that between 3 and 20% of the 18% of mothers not romantically involved with the biological father could be living with a new male partner.

Table 2. Baseline Descriptive Statistics for Sample of Mothers Ever Eligible for Forming First New Partnership (N = 2,016)

Not co-resident with focal child's biological father at time of child's birth	63.2
Number of waves 'eligible' for first new partnership (living away from biological father)	
One survey wave	35.5
Two survey waves	33.1
Three survey waves	31.5
Mother and child's socio-demographic and background characteristics	
Mother's age (in years)	23.5
Mother's race/ethnicity	
Non-Hispanic white and other	15.5
Non-Hispanic black	62.5
Hispanic	22.0
Mother born in the United States	92.2
Focal child is male	53.8
Focal child born at low/very low birth weight	11.3
Focal child is mother's first birth	41.0
Mother reported fair/poor health at child's birth	7.7
Focal child's grandmother exhibited symptoms of depression/anxiety	29.2
Mother's attitudinal and cultural factors	
Believes single mothers can raise children as well as two parents	86.1
Believes men cannot be trusted to be faithful	25.0
Attended religious services at least monthly at time of child's birth	34.6
Lived with both biological parents at age 15	32.9
Mother's economic characteristics	
Educational attainment at child's birth	
<HS/GED	45.3
High school diploma	28.6
Some college or more	26.1
Employed in the year preceding child's birth	79.7
City-level contextual factors[a]	
Welfare generosity	
High benefits	37.5
Moderate benefits	29.0
Low benefits	33.5
Labor market strength	
Weak	37.0
Average	29.9
Strong	33.1
Child support enforcement	
Strict	54.3
Moderate	12.3
Lenient	33.4

Note: The sample is limited to mothers with unmarried births who lived with the focal child, did not live with the child's biological father, and had not previously been observed in a new partnership in at least one of the post-birth survey waves. All characteristics were measured at the time of the child's birth.

[a] These variables are defined according to the criteria used in selecting cities to be included in the sampling frame for the Fragile Families study. See Reichman et al. 2001 for more information.

Table 3. Characteristics of new and former partners among mothers in first-time new partnerships following a non-marital birth

Subject	**First-time new partner**	**Focal child's biological father**			
Reporter	Mother	Mother	Father	Mother	Father
Survey wave of report	Current wave	Child's birth	Child's birth	Current wave	Current wave
Column n[a]	791	791	541	791	417
% interviewed (of possible)	-	-	68.4	-	52.7
Partner's characteristics					
Never incarcerated[b]	79.1	51.7*	66.1*	34.2*	56.4*
Employed	81.3	70.2*	71.7*	55.1*	65.4*
Educational attainment[c]					
<HS/GED	16.5	47.8*	52.3*	-	48.5*
High School Diploma	59.1	32.4*	27.3*	-	26.0*
Some college or more	24.4	19.8*	20.4[#]	-	25.5

Note: The sample is limited to mothers observed in a first new partnership 1, 3 or 5 years after the focal child's birth. Estimates are unweighted. Statistically significant differences between new partners' and biological fathers' characteristics: *p<.05, [#]p<.1.

[a] This represents the total sample size in each column. Sample sizes for particular outcomes vary due to item non-response.

[b] Because mothers and fathers are not asked about the biological father's incarceration history at the baseline survey, information about "child's birth" is drawn from the one-year interviews.

[c] Mothers are asked about the biological father's educational attainment only at the baseline interview, and they are asked about new partners' education only at years three and five.

Table 4. Within-mother comparisons of new partners' and biological fathers' employment status, incarceration history, and educational attainment

Incarceration History (N = 670)[a]

	New Partner		
Biological Father	Ever incarcerated	Never incarcerated	Total
Ever incarcerated	12.8	35.1	47.9
Never incarcerated	9.0	43.1	52.1
Total	21.8	78.2	100.0

Employment Status (N = 622)[b]

	New Partner		
Biological Father	Not employed	Employed	Total
Not employed	6.1	23.0	29.1
Employed	10.3	60.6	70.9
Total	16.4	83.6	100.0

Educational Attainment (N = 696)[c]

	New Partner			
Biological Father	<HS/GED	HS Diploma	Some College+	Total
<HS/GED	8.9	28.7	11.7	49.3
HS Diploma	4.4	16.9	5.2	26.4
Some College+	3.0	14.2	7.1	24.3
Total	16.3	59.7	24.0	100.0

Note: The sample is limited to mothers observed in a first new partnership 1, 3 or 5 years after the focal child's birth with valid information about both current and former partners' characteristics. Estimates are unweighted.

[a] Information about the biological fathers' incarceration history is taken from the mother's one-year report because mothers are not asked at the child's birth if the father had ever been incarcerated.

[b]Biological fathers' employment status is based on mothers' baseline reports.

[c]Biological fathers' education is updated using the father's own current report if available since mothers are not asked to update their baseline reports of biological fathers' education. New partners' education at one year is imputed (see text for more details).

Table 5. Odds Ratios from Discrete-Time Logit Model of Mother's First New Partnership (n = 4,030)

Duration of eligibility for forming first new partnership (vs. one survey wave)	
Two survey waves	1.23
Three survey waves	1.35 *
Focal child's age (vs. 1 year)	
3 years	1.30 #
5 years	1.65 **
Mother and child's socio-demographic and background characteristics	
Mother's age at focal child's birth	0.92 **
Mother's race/ethnicity (vs. white and other, non-Hispanic)	
Black, non-Hispanic	0.63 **
Hispanic	0.69 **
Mother born in United states	0.85
Focal child is male	1.08
Focal child born at low/very low birth weight	1.03
Focal child is mother's first birth	0.65 **
Mother reported fair/poor health (preceding wave)	1.10
Focal child's grandmother exhibited symptoms of depression/anxiety	1.15 #
Mother's attitudinal and cultural factors	
Believes single moms can raise children as well as two parents (child's birth)	1.02
Believes men cannot be trusted to be faithful (child's birth)	0.96
Attended religious services at least monthly (preceding wave)	0.92
Lived with both biological parents at age 15	0.99
Mother's economic characteristics	
Educational attainment at child's birth (vs. some college or more)	
<HS/GED	1.07
High school diploma	1.15
Obtained additional schooling since child's birth (preceding wave)	0.71 **
Employed (preceding wave)	0.94
City-level contextual factors	
Welfare generosity (vs. low benefits)	
High benefits	0.77 *
Moderate benefits	1.12
Labor market strength (vs. strong)	
Weak	1.02
Average	1.07
Child support enforcement (vs. lenient)	
Strict	1.04
Moderate	1.10

# p<.1, * p<.05, ** p<.01.

Note: The sample is limited to mothers with unwed births who had not been observed in a new partnership in a previous survey wave, were not currently co-residing with the focal child's biological father, and were currently living at least half-time with the focal child. The dataset is arranged by person-years, with mothers contributing one observation each survey wave they are eligible for a first new partnership. Standard errors are adjusted for city-level clustering in the Fragile Families sample.

Table 6. Odds ratios from logistic regressions predicting trading up or trading down in partners' characteristics among mothers in first new partnerships[a]

	Incarceration		Employment		HS Completion		College[b]	
	Traded Down OR	Traded Up OR	Traded Down OR	Traded Up OR	Traded Down OR	Traded Up OR	Traded Down OR	Traded Up OR
Duration of eligibility at first new partnership (vs. 1 survey wave)								
Two survey waves	0.29 **	1.16	0.59	0.61	0.59	1.81	0.49	0.77
Three survey waves	0.18 *	1.36	0.96	1.76	0.27	1.67	0.21	0.80
Focal child's age at first new partnership (vs. 1 year)								
3 years	1.98	2.61 #	0.92	1.93	0.22	1.86	1.52	0.94
5 years	2.08	3.55 *	0.73	1.46	0.45	1.75	10.02 *	0.80
Mother and child's socio-demographic/background characteristics								
Mother's age at focal child's birth	1.02	1.01	0.93 #	1.03	0.96	1.00	1.12	1.10 **
Mother's race/ethnicity (vs. white and other, non-Hisp.)								
Black, non-Hispanic	5.93 **	0.38 **	2.37 *	0.32	1.08	0.47	3.94	0.85
Hispanic	4.83 *	0.66	1.72	0.34	3.39 #	0.23 **	1.70	0.80
Mother born in United states	2.52	0.82	2.00	1.34	1.38	1.01	1.36	5.95
Child is male	0.99	0.87	1.12	1.17	1.70	1.52	1.03	0.96
Child was low/very low birth weight	0.24 #	0.68	0.57	0.76	0.87	0.80	0.62	0.86
Child is mother's first birth	1.12	0.80	0.98	1.58	1.42	0.81	2.08	1.60 #
Mother reported fair/poor health (preceding wave)	3.59 **	0.80	2.73 **	1.09	0.96	1.03	0.93	1.19
Child's grandmother exhibited symptoms of depr./anxiety	2.72 **	0.59 *	1.92 *	0.52 #	2.06	0.72	4.02	0.66
Mother's attitudinal and cultural factors								
Believes single moms can raise children as well as two parents	0.62	2.86 **	0.71	1.18	0.97	0.39 #	0.77	0.97
Believes men cannot be trusted to be faithful	1.94 #	1.35	1.27	1.03	0.57	0.63	0.85	0.94
Attended religious services at least monthly (prec. wave)	0.98	0.91	0.91	0.85	0.84	1.26	0.61	1.12
Lived with both biological parents at age 15	0.82	1.26	0.67	1.34	0.29	0.90	1.42	0.69
Mother's economic characteristics								
Educational attainment at child's birth (vs. some college+)								
<HS/GED	0.93	1.24	0.47 #	0.76	1.89	1.18	4.05	0.76
High school diploma	1.35	0.85	0.87	0.47	1.54	1.19	4.50	0.84
Obtained additional schooling since child's birth (prec. wave)	1.28	0.86	1.36	0.58	0.95	2.71 *	0.70	1.62 #
Employed (preceding wave)	0.39 *	2.31 **	0.75	2.73 #	0.54	0.86	1.16	1.17
City-level contextual factors								
Welfare generosity (vs. low benefits)								
High benefits	0.40 *	2.55 **	1.35	0.97	0.44	1.60	0.89	1.14
Moderate benefits	0.36 **	1.90 #	0.76	2.47	0.74	1.52	1.11	0.93
Labor market strength (vs. strong)								
Weak	0.45 *	1.27	0.70	0.95	0.88	1.28	0.57	1.02
Average	0.45 **	1.51	0.78	0.90	0.87	1.34	0.91	0.96
Child support enforcement (vs. lenient)								
Strict	0.84	1.05	0.88	0.56	1.15	0.80	0.74	1.06
Moderate	1.17	1.82	0.97	0.40	1.26	0.72	0.31	0.61
N	317	281	392	151	303	297	147	453

Note: The sample is limited to mothers in a first new partnership. Standard errors are adjusted for city-level clustering. # p<.1, * p<.05, ** p<.01.

[a]Each column represents a separate logistic regression model. The models labeled "traded down" use the sample of mothers originally partnered with biological fathers with positive attributes, and predict "trading down" versus re-partnering with a man who also had the positive attribute. The models labeled "traded up" use the sample of mothers originally partnered with biological fathers with negative attributes, and predict "trading up" versus re-partnering with a man who also had the negative attribute. Total sample sizes vary across outcomes due to missing data about biological fathers' and/or new partners' characteristics.

[b] Defined as having attended at least some college.