Maternal Re-Partnering and New-Partner Fertility: Associations with Nonresident Father Investments in Children

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Abstract

Research suggests that *paternal* re-partnering and new-partner fertility are associated with decreased nonresident father investments in children. Few studies, however, have examined the influence of *maternal* re-partnering and new-partner births on nonresident father investments. We use data from the National Longitudinal Survey of Youth to examine associations of maternal re-partnering (through cohabitation or marriage with a new partner) and new-partner births with nonresident father visitation and child support payments. Results suggest that maternal re-partnering is associated with a decrease in both yearly father-child contact and child support received by the mother. New-partner fertility for mothers who are co-residing with a partner is associated with an additional decrease in monthly father-child contact, but does not have an additional influence on yearly father-child contact or child support receipt.

Most US children today will not spend their entire childhood living with their married biological parents, and those who do not will most commonly live apart from their biological father (Grall, 2009). Father absence is adversely associated with children's wellbeing (see Amato, 2005, for a review). However, existing evidence also suggests that, among children with nonresident fathers, father investments of time and money may positively influence child development (see, for example, Amato & Gilbreth, 1999; Bauserman, 2002; Greene & Moore, 2000). This makes studies of the factors associated with nonresident fathers' investments particularly important.

Two key factors that may affect the level of investment provided by nonresident fathers are new partners and new children. As we document below, some research has found that paternal re-partnering is associated with reductions in both the amount of time fathers spend with their nonresident children and the economic support they provide for them. Whereas a research literature on *paternal* re-partnering and nonresident father investments in children is emerging (see, for example, Bronte-Tinkew, Horowitz, & Scott, 2009), fewer studies have examined the influence of *maternal* re-partnering on nonresident father investments. Moreover, only a handful of studies examine whether new births influence nonresident father investments, and these studies predominantly focus on paternal, rather than maternal, fertility. As such, there is limited evidence on the influence of maternal re-partnering and new-partner fertility on changes in nonresident father involvement with children or on associations of maternal re-partnering and new-partner fertility with child support receipt.

A recent study by Tach, Mincy, and Edin (2010) presents what is potentially the most compelling evidence to date with regard to associations between parental re-partnering and nonresident father involvement with children. Similar to previous research, results suggest that, among parents who were unmarried at the time of their child's birth, father involvement declines when either mothers or fathers re-partner during the first five years of a child's life. A more unusual finding, which may initially seem counterintuitive, is that declines in father involvement are larger when the mother re-partners than when the father re-partners. Notwithstanding its important contributions, the study also has several limitations. First, its results are generalizable only to urban, relatively disadvantaged parents who experienced a non-marital birth between 1998 and 2000. Second, the study assesses associations between parental re-partnering and father-child contact, but is silent with regard to child support payments, an important means through which nonresident fathers may invest in children and a type of investment that may be the result of a different process than investments of time. Finally, the study only assesses re-partnering and new births within five years of the focal child's birth and, as we describe below, both previous research and existing theory suggest that a longer timeframe may reveal different patterns.

Our analyses use data on just over 4,500 children from the National Longitudinal Survey of Youth (NLSY) and fixed-effects regression models to examine whether maternal re-partnering, in the form of new marriages and cohabitations, and maternal new-partner births are associated with changes in father investments with regard to both visitation and child support payment. Whereas our data include maternal reports of nonresident father behaviors vis-à-vis investments in these domains, they do not include information on paternal re-partnering or paternal new-partner fertility; they do, however, enable us to focus on a broader sample than non-marital births in urban areas. In addition, we consider the influences of re-partnering and new-partner fertility independently and in combination. Finally, a particular strength of our analysis is that we are able to analyze changes in maternal partnership and fertility, as well as nonresident father investments in children, over a relatively long time period.

Conceptual framework

Several perspectives have been offered to explain how fathers make decisions about whether to invest in their nonresident children. Recent work has identified *role ambiguity* as a particular issue for nonresident fathers. Whereas there are institutionalized expectations regarding investment in children by their resident fathers, there are fewer clear-cut expectations of fathers who do not live with their children (see, for example, Guzzo, 2009). Such ambiguity regarding expected nonresident father investments may encourage some fathers to disengage from their existing nonresident biological children and form parental ties with new social, step, or biological children. Indeed, some men may view their romantic and childrearing relationships as a "package deal" in which they have an intimate relationship with a partner and responsibility for her children while they are together (see, for example, Furstenberg & Cherlin, 1991; Townsend, 2002). If the partnership ends, and especially if the breakup was initiated by the partner, some fathers may believe their responsibility for their (and her) children changes dramatically, such that their own obligation to engage in principal childrearing activities ends. We would expect such fathers to make limited contributions to their children, in terms of both time and money, once their intimate relationship with the children's mother ended. If the mother then entered into a new romantic relationship, especially if this relationship involved marriage, cohabitation, or the birth of a new child, the nonresident father may further disengage. Whereas this is the dominant perspective in the literature, it is also possible that some fathers will see a new man in their child(ren)'s life (potential father figure) as competition; these fathers may respond by *increasing* their contact with their child(ren).[1]

In addition, maternal gate-keeping behaviors may change when fathers or mothers re-partner or have new-partner births (Claessens, 2007; Kamp Dush, Kotila, & Schoppe-Sullivan, 2011). In such cases, mothers may limit nonresident fathers' access to their children either because they are concerned that their ex-partner's ongoing involvement in their lives will adversely affect their current relationships or because they disapprove of or have negative feelings about their ex-partners' current relationships or family situations. Furthermore, maternal re-partnering into marriage or cohabitation may be accompanied by a residential move on the part of the mother. To the extent that such moves serve to increase the geographic distance between mothers' and fathers' households, they too may limit nonresident fathers' access to children.

These ideas are particularly relevant to nonresident father involvement in the form of father-child contact or visitation. They suggest that nonresident fathers would visit less when either they or their partner entered a new relationship, and especially if either of these relationships resulted in a new child. In general, this means that visitation or contact would be expected to decline over time, as the cumulative likelihood of either the father or the mother entering a new relationship obviously increases over time.

Patterns of formal child support payment[2] may be quite different from patterns of visitation. To begin with, the consequences of stopping payment may be more serious than the consequences of stopping visitation: with regard to the former, an enforcement system exists that could result in a father being fined, losing his driver's license, or, ultimately, being jailed, if he does not meet his formal child support obligations; no such enforcement system exists with regard to visitation (or informal child support). In addition, child support payment (whether formal or informal) requires a different set of economic resources than does visitation. To the extent that a father has new financial demands (or fewer financial resources) as a result of a new partnership or child, we may expect a larger change in child support payment than in time investments (father-child contact), despite the clear opportunity costs of time investments.

Along these lines, it is generally accepted that that child support payments are related not only to a father's willingness to pay, but also both to his ability to pay and to the strength of the child support enforcement system (see, for example, Bartfeld & Meyer, 2003; Beller & Graham, 1993). The existence of the enforcement system further suggests that new partnerships and fertility will be less strongly linked to formal child support payments than to visitation and informal child support. The link between a father's ability to pay and his financial investments in nonresident children through formal or informal support may suggest that fathers who have new children will, all else equal, invest less money in a given child because there are more claims on their resources and fewer resources to spend on any one child. As such, child support payments may be more heavily influenced by whether a father has new children to support than by whether he has a new partner or by whether his ex-partner is in a new relationship or has a new child with someone else. At the same time, however, some fathers may reduce child support payments to mothers who re-partner or have new-partner births because they are concerned that some portion of their payments will be spent on these partners or children or because they perceive the (mother and) child to

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[1]Paternal role ambiguity may also come into play when a nonresident father enters a relationship with a new partner himself. In this case, a father may view his primary responsibility as being tied to his new partnership and to any children that result from it; fathers may also accept some degree of responsibility for existing children of their new partner. This suggests that some fathers may "swap families," such that their primary responsibilities and investments will be concentrated on their current partner and her (or their) children, rather than their own nonresident biological children (see, for example, Furstenberg, 1995; Manning & Smock, 2000).
[2]We focus on child support payments, rather than child support orders, because orders do not generally change when either fathers or mothers enter new partnerships, nor when mothers have new-partner births (Takas, 1994). We note, however, that in some states the child support order can be adjusted if the father has a new child (Takas, 1994; Vehohr & Griffith, 2005).

have less need for such payments given the new partner's potential to contribute income to their household. Indeed, recent work using data from the Fragile Families and Child Wellbeing Study suggests that mothers who re-partner tend to do so with men who are more economically advantaged than their child's father (Bzostek, McLanahan, & Carlson, in press).

In short, we expect father-child contact to decrease when either a father or his nonresident child(ren)'s mother forms a new partnership. We expect few effects on formal child support payments as long as the enforcement system is strong. The potential influences of maternal or paternal re-partnering on informal child support are somewhat ambiguous theoretically, although most factors suggest that such investment will decline when either parent re-partners. Turning to new-partner births, we expect nonresident father visitation to decrease when either the father or mother has a child with a new partner. We expect decreased formal and, especially, informal child support payment when the father has a new child, assuming that having to support a new child may affect his ability to pay and that, in some circumstances, formal support orders may be altered based on the father having a new biological child. Whether mothers' new-partner births will influence nonresident father payment of child support is theoretically ambiguous. As noted above, however, our data allow us only to test the influences of maternal re-partnering and new-partner births on nonresident father investments in children; thus, our empirical analyses do not address the influences of paternal re-partnering and new-partner births on such investments.

Before turning to a review of the prior empirical literature, we note that measuring the relations among parental re-partnering, new-partner births, and investments in children is complicated by the difficulty of fully accounting for differences in parents' characteristics and the quality of their relationship, factors which may be associated with the probability of re-partnering or having a new-partner birth, as well as with later investments in children. For example, some fathers may be "family men" with greater interest in children—an unobserved characteristic that may predict both greater investments in their nonresident children and an increased probability of entering a new partnership involving additional children. Also, high-conflict relationships may result in lesser investments by nonresident fathers, which may in turn increase the probability of either or both parents entering new partnerships. Our conceptual framework does not explicitly address these measurement issues, but we return to them in discussing our estimation methods.

Prior evidence

A growing body of research examines the relations between mother and father re-partnering, new-partner fertility, and nonresident father investments in children. This literature most often focuses on associations of nonresident fathers' re-partnering and new-partner fertility with these men's investments in children with regard to visitation frequency and payment of child support; relatively less empirical research considers changes in investments associated with maternal re-partnering and new-partner fertility, the focus of our analysis. Like most prior research in this area, we also focus on nonresident father visitation frequency and payment of child support; we note, however, that father investment (or involvement) is a multidimensional construct that may also include factors such as the types and quality of parenting behaviors fathers exhibit as well as the types and quality of interactions between fathers and children.

Re-partnering and visitation

Theory suggests that there should be less visitation and father-child contact in the context of new partnerships, regardless of whether a re-partnering is of the mother or of the father. Maternal re-partnering may result in nonresident fathers feeling uncertain about their

standing in the family and therefore visiting less. Fathers who have re-partnered may spend less time with their nonresident children because they need to be fully present as part of the "package deal" in their new relationship. Furthermore, mothers may be less likely to grant or facilitate visitation when either parent has re-partnered. In general, the empirical literature supports these hypotheses, although the findings are stronger with regard to re-partnering among fathers than among mothers. Several studies have found that fathers visit less when they are in (or when they start) new partnerships (Carlson, McLanahan, & Brooks-Gunnm 2008; Manning & Smock, 1999; Seltzer, 1991; Stephens, 1996), though the type and timing of the new relationship may matter (Cooksey & Craig, 1998; Juby, Billette, Laplante, & Le Bourdais, 2007). Other studies find no effect of paternal re-partnering (Garasky, Stewart, Gundersen, & Lohman, 2010; Manning, Stewart, Smock, 2003; Tach et al., 2010). Prior research has also generally found that nonresident fathers engage in less visitation when mothers re-partner (Carlson et al., 2008; Guzzo, 2009; Juby et al., 2007; Peters, Argys, Howard, & Butler, 2004; Seltzer, 1991; Tach et al., 2010) although, again, there are studies that show no significant association in this regard (Cheadle, Amato, & King, 2010; Garasky et al., 2010; Manning & Smock, 1999; Stephens, 1996).

New-partner fertility and visitation

The literature on new-partner fertility and visitation generally supports the notion that nonresident fathers visit less when they have new children or children from previous partnerships (Carlson et al., 2008; Cooksey & Craig, 1998; Guzzo, 2009; Juby et al., 2007; Manning, Stewart, & Smock, 2003; Manning & Smock 1999; Nepomnyaschy, 2007; Tach et al., 2010); however, a few studies have found no effects (Garasky et al., 2010; Greene & Moore, 2000; Stephens, 1996). Of particular note, we identified no studies that show an overall positive association between paternal new-partner fertility and visitation, which we would expect if some men were "family men" (more likely to have children and more likely to be involved with all of their children) and unobserved differences between these and other nonresident fathers were not adequately controlled. There is considerably less research that examines mothers' new-partner fertility, and the limited existing evidence is more mixed: Two studies found that fathers visit less when mothers have new births (Guzzo, 2009; Tach et al., 2010), whereas three studies found no effect of maternal new-partner births on nonresident father visitation (Carlson et al., 2008; Juby et al., 2007; Nepomnyaschy, 2007).

Re-partnering and child support

We anticipate that formal child support will not decline when either mothers or fathers enter new relationships, primarily because the child support system can enforce obligations with significant penalties, thereby reducing fathers' discretion with regard to their payments. We anticipate informal support will decline. However, much of the prior research examines only the total of formal and informal support, and does not differentiate between them, making it difficult to ascertain whether these hypotheses have been supported. Fathers in a new union have been found to pay similar amounts of total support to those who remain single (Smock & Manning, 1997). Furthermore, all else equal, fathers who have (re)married have been found to pay *more* total child support than those who remain single (Garasky et al., 2010; Manning et al., 2003; Seltzer, 1991), which is consistent with the idea that the former are "family men." However, the association between paternal remarriage and child support may change over time. For example, Seltzer (1991) finds that fathers who remarry are less likely to pay total support during the first five years, but more likely to pay thereafter.

Results from the few existing studies on maternal re-partnering and nonresident father payment of total child support suggest they are unrelated (Garasky et al., 2010; Seltzer, 1991). On the whole, then, these results are broadly consistent with child support investments being primarily non-discretionary, rather than primarily voluntary, most likely

because most of the investment (the formal portion) is enforced by a formal child support system.

New-partner fertility and child support

Findings with regard to associations between new-partner fertility and child support have been decidedly mixed. Several studies suggest that fathers who have had children with multiple partners are less likely to pay total support to any given child (Craigie, 2010; Garasky et al., 2010; Manning et al., 2003; Manning & Smock, 2000), and Neponmyaschy and Garfinkel (2010) shows that this affects informal, but not formal support. However, other studies have found no effect (Nepomnyaschy, 2007; Smock & Manning, 1997) or even a positive effect (Greene & Moore, 2000) of other-partner (though not necessarily "new") paternal fertility. Meyer, Cancian, and Cook (2005) find that fathers who have had children with a greater number of partners pay more formal child support but, because the amount they owe increases more rapidly than the amount they pay, their compliance rate (amount paid divided by amount owed) is inversely related to the number of children they have had with different partners. Finally, existing work has generally found few associations between mothers' new-partner fertility and formal child support receipt (Bartfeld & Meyer, 2003; Craigie, 2010; Meyer et al., 2005; Neponmyaschy, 2007). But, informal support has been found to be lower when mothers have had children with other partners (Nepomnyaschy & Garfinkel, 2010; Meyer & Cancian, in press) and informal support, which could be used to benefit all children in the mother's household, is particularly likely to decline after a mother has had a child with a new partner (Meyer & Cancian, in press). The fact that fathers' other-partner fertility is more closely linked to child support than mothers' other-partner fertility is broadly consistent with the notion that child support payments are primarily affected by father ability to pay.

Summary

As this review highlights, there is a relatively substantial body of research on associations of fathers' new relationships and new-partner births with their investments in children vis-à-vis visitation and child support; the associations of mothers' new relationships and new-partner births with investments made by their children's nonresident fathers are relatively under-studied. An additional limitation of the existing literature is that a substantial portion of the empirical research in this area considers only families who had non-marital births, and has almost exclusively relied on data from the Fragile Families and Child Wellbeing Study (Carlson et al., 2008; Craigie, 2010; Guzzo, 2009; Mincy & Pouncy, 2007; Nepomnyaschy, 2007; Tach et al., 2010). Families with marital and non-marital births may, in general, display different patterns of nonresident father investment in children; these family types may also exhibit different patterns of association of life events, such as re-partnering and new-partner births, with nonresident father investments. Furthermore, given a limited number of data sources for research on this topic, much prior work has been able to consider only one or two time points (Bartfeld & Meyer, 2003; Cooksey & Craig, 1998; Manning et al., 2003; Manning & Smock, 1999, 2000; Meyer et al., 2005; Seltzer, 1991; Stephens, 1996); other studies have had multiple time points, but have only been able to examine the first five years of a child's life (Carlson et al., 2008; Craigie, 2010; Guzzo, 2009; Mincy & Pouncy, 2007; Nepomnyaschy, 2007; Tach et al., 2010). The ability to observe families over longer time periods will allow us to include a more broadly representative set of transitions in partnering and fertility and, thereby, to provide a more complete picture of the potential influence of maternal re-partnering and new-partner fertility on nonresident father investments in children throughout childhood. Finally, findings from prior literature suggest that it is important to employ statistical methods that adjust for both observed and unobserved characteristics, given that differences between types of men and women who go on to have new partnerships and new births and those who do not may bias associations of

new partnerships and new-partner births with nonresident father investments if they are not appropriately controlled.

Data

We use longitudinal data from the NLSY, a nationally representative sample of 14 to 21 year olds in 1979 who were interviewed annually from 1979 to 1994 and biennially thereafter. In 1986, the NLSY began a separate biennial survey of children born to women of the original 1979 sample. Together, the adult and child data provide detailed information on marriage, family structure, and living arrangements; a host of economic, demographic, and other characteristics and behaviors; and nonresident father involvement and child support receipt for children living with their biological mothers.

Our analysis sample is based on children observed between 1986 and 2006, who were younger than 14 years old,3 lived in a household that did not include their biological father, and whose nonresident father was alive. A child enters our sample when he or she is first observed living with his or her single mother (who does not live with a romantic partner or spouse) or with his or her mother and a social father, which we define as a man who is the spouse or cohabiting partner of a child's mother but is not the child's biological father. We exclude from our analyses families in which parents reunify at any point during the observation period. We conducted our analyses using a "stacked panel" consisting of child-interview wave observations that met our sample inclusion criteria. In all, we utilized 14,815 child-wave observations of 4,567 children.4

Measures

Nonresident father investments

We focus on 4 measures of nonresident father investments in children: (1) whether the father has seen the child during the past year; (2) whether the father has seen the child at least once a month during the past year; (3) whether the mother received child support during the past year; and (4) the amount of child support (in 2005 dollars) the mother received.5 An important limitation of our child support measures is that, in the NLSY, mothers are simply asked whether they received any income from child support during the past year and, if so, how much. Thus, we cannot tell whether such support is received through the formal child support system or whether it is informally transferred from a father to the mother. Furthermore, this measure does not identify specific payments from the focal child's father on behalf of that child. Rather, it includes all payments on behalf of any of the mother's children, and from any men with whom she has had children.6 Finally, we note that, although we model them separately, there is evidence that child support and father involvement are positively correlated (Nepomnyaschy, 2007).7

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[3]We limit our sample to children under age 14 because father-child contact for older children may reflect the choices made by the child as much or more so than choices made by the father (see, for example, Hawkins, Amato, & King 2007).

[4]Note that our unit of analysis is a child. Thus, multiple children of a mother may be treated as separate "focal" children.

[5]We also estimated supplemental models in which we used the natural logarithm of the amount of child support the mother received as the outcome variable. Results (not shown) were consistent with those of our primary models.

[6]As discussed below, in order to test the likelihood that our results reflect payments on behalf of the focal child, we estimated models for which we limited our analysis sample to families in which the focal child was the only child previously born to the mother (such that there is only one child for whom the mother could be receiving child support and only one father who could be paying it).

[7]In our data, the bivariate correlation of any father child contact in the last year with any child support received and with the amount of child support received, respectively, is 0.22 and 0.18; the correlation of monthly father child contact in the last year with the two child support measures is 0.18 and 0.17.

Maternal re-partnering and new-partner births

Our primary predictors of interest include measures of maternal re-partnering and new-partner births. Specifically, we assess whether a mother was re-partnered (observed living with a social father) at each interview wave (30% of the child-wave observations) and, in supplemental models, whether a new partnership took the form of cohabitation (9%) or marriage (21%). We also model whether a mother had a new birth between contiguous interview waves (16% of the child-wave observations). Finally, in some models, we include an interaction between re-partnering and having a new birth.

Covariates

Because our primary analyses consist of fixed-effects regressions (described below), we control only for time-varying covariates, as all time-invariant covariates are differenced out of the models.8 These time-varying covariates include the focal child's age, the mother's age, the mother's education, the number of adults in the household, the number of children in the household, whether any non-biological children to the mother lived in the household, household income in the prior year (in year 2005 dollars), whether the mother or her spouse or partner received cash welfare (AFDC or TANF) in the past year, the number of hours the mother worked in the past year, the proportion of the child's life spent without his or her biological father in the household, whether the biological mother and father live more than 100 miles apart, and the number of new births the mother had since entering our sample (but prior to the current observation). We constructed our primary measure of the proportion of the child's life during which his or her father was nonresident from two questions that children's biological mothers were asked at each interview between 1992 and 2006: (1) whether the biological father never lived in the household; and (2) if the biological father ever lived in the household, the date that he left the household. Mothers' reports with regard to both of these items were often inconsistent across interview waves. Therefore, we utilized data from the mother's *first report* on these items (i.e., the date she reported at the first interview in which she responded to these items), along with the child's date of birth and each interview date, to obtain the proportion of the child's life that was spent with a nonresident father as of each interview. We also include in our regression models an indicator variable for cases in which the mother's report regarding the father's presence in the household varied considerably across interview waves.9

Methods

Our analytic approach consists primarily of logit and ordinary least squares (OLS) regressions with child fixed effects. These models are identified by within-child change over time and have the advantage of adjusting for unobserved time-invariant child and family characteristics. That is, they assess the extent to which father investments change when

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[8]In supplemental analyses, however, we estimated standard logistic and ordinary least squares regressions as well as random effects regressions. For those models, we also controlled for the following time-invariant covariates: whether the child is male, the child's race/ethnicity, the child's birth order, whether the child was low birth weight, whether the child is disabled, whether the mother was US born, the mother's age at the birth of her first child, whether the mother lived with both of her biological parents at age 14, whether the mother was in a fight at work or school (in 1980), maternal self-esteem (in 1980), maternal locus of control (in 1979), maternal academic aptitude measured by the Armed Forces Qualification Test (in 1980), and whether the mother reported being married at the time of the first interview after the focal child's birth.

[9]Specifically, we constructed three alternative versions of the proportion of the child's life that was spent with a nonresident father, based on reports provided by the mother at other time points. These included the earliest date that she ever reported for the father having left the household (regardless of the interview at which she made this report), the latest date she ever reported for the father having left the household (regardless of the interview at which she made this report), and the date she reported for the father having left the household at her last (most recent) interview. For each interview wave, we then compared our primary measure to each of these alternative measures and constructed an indicator for whether—for that interview wave—there was a 20% or greater difference between the value calculated by our primary measure and that which was calculated by any of the alternative measures. We include this indicator in all of our regression models.

mothers enter into new partnerships or have new-partner births, while differencing out all (observed and unobserved) time-invariant factors. However, the models are subject to bias due to omitted time-varying factors as well as time-invariant factors that have time-varying effects on the outcome.[10] We use logit regressions for the three dichotomous outcomes (yearly father-child contact, monthly father-child contact, and any child support received) and OLS regressions for the continuous outcome (child support amount).

To be consistent with prior research in this area, we also estimated supplemental models using standard logit and OLS regressions as well as random-effects logit and OLS regressions. The standard regressions (OLS and logit) are identified by between-child variation and assess whether there are static differences in *levels* of nonresident father investments for children whose mothers have re-partnered or had new births compared to those whose mothers have remained single or avoided additional fertility. They adjust for observed (time-varying and invariant) child and family characteristics that may be associated with both selection into maternal re-partnering or new-partner births and father investments in children, and are subject to omitted variable bias with regard to both time-varying and time-invariant factors. The random-effects models utilize both within- and between-child variation to estimate between-child differences in levels of father investments for families that do or do not experience a maternal re-partnership or new-partner birth. Like the standard regressions, they adjust for observed (time- varying and invariant) selection factors. In addition, they adjust for within-child differences by accounting for individual intercepts as a component of the error term. Results from these models are subject to bias if unobserved heterogeneity between children is correlated with the key outcomes and explanatory variables. Because the fixed-effects regressions are likely to reduce bias to a greater extent than both the standard regressions and random-effects regressions (Halaby, 2004), we present results in the tables for only our primary fixed-effects analyses. We report the results of the supplemental standard and random-effects regressions in the text.

Results

Descriptive statistics

Descriptive statistics by re-partnering and new-partner birth status are presented in Table 1. The first two columns compare father investments and family characteristics for families in which the mother did and did not re-partner; the third and fourth columns compare families in which the mother did and did not have a new birth; the final two columns compare families in which the mother re-partnered by whether she did or did not have a new birth. With regard to father investments, the raw data reveal that children whose mothers have re-partnered have less contact with their fathers, but their mothers are slightly more likely to receive child support and also receive a higher amount of child support. This pattern differs with regard to new births. Here, we see no difference in whether a child has seen his or her father in the last year, but that children whose mother had a new birth are slightly more likely to have seen their father at least once a month in the last year. Mothers who had a new birth are less likely to receive child support and receive lower average amounts of support. Finally, among those families in which the mother has re-partnered, we find no differences between those with and without a new birth with regard to either father-child contact or child support.

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[10]In addition, the fixed-effects models do not allow for the effects of time-invariant factors to be directly estimated because these factors are differenced out of the model. As such, we are unable to estimate associations of characteristics such as race and ethnicity with nonresident father investments, although existing evidence suggests that there are differences in such investments between racial and ethnic groups (King, Harris, & Heard, 2004).

The raw data also reveal considerable differences in family characteristics by re-partnering and new-partner birth status. In general, mothers who re-partner tend to be more advantaged than those who do not with regard to education, income, welfare receipt, work hours, and having been married at the focal child's birth. As was the case with father investments, the pattern for new births is quite different. Compared to mothers who did not have a new birth, those who did tend to be less advantaged in terms of education, income, welfare receipt, years spent without the focal child's father in the home, and the likelihood of having been married at the focal child's birth. Differences in the characteristics of re-partnered mothers who did and did not have a new birth are generally smaller in magnitude, but also suggest that new births are more common among less advantaged mothers. Given these differences in the background characteristics associated with re-partnering and new births, we estimated fixed-effects regressions that adjust for observed and unobserved time-invariant characteristics, in addition to observed time-varying characteristics.

Primary regression results

Table 2 presents our primary fixed-effects regression results. Model 1 includes an indicator for whether the mother is re-partnered (there is a social father to the focal child in the household) and all of the time-varying covariates, but none of the new-birth variables. We find that maternal re-partnering is associated with a lower probability that the biological father has seen the focal child in the last year, as well as with the mother having received a smaller amount of child support; it is not associated with whether the father saw the focal child monthly during the last year or whether the mother received any child support.

Model 2 examines the association between a new birth and nonresident father involvement, without considering re-partnering status. Here, we also control for the number of new births the mother has had prior to the wave being considered (but during the data observation period). We find no association between whether the mother had a new birth and any of the measures of nonresident father involvement. However, prior new births are associated with a lower probability that the focal child had monthly contact with the father, a higher probability of child support receipt, and a higher amount of child support received.

Model 3 includes both re-partnering and new births. The estimates for each of these variables are quite consistent with those from the previous models, suggesting that including both in the model has little influence on the estimate for either. We find re-partnering to be inversely associated with father-child contact and the amount of child support received in the last year; prior (but not current) new births are associated with a lower probability of monthly father-child contact, as well as with a higher probability that the mother received any child support in the last year and a higher amount of child support received.

The final model (Model 4) adds the interaction between maternal re-partnering and having a new birth since the prior interview wave. The estimates for the re-partnering, new birth, and prior new births variables are affected little by the addition of this variable. The re-partnering*new birth interaction is associated with a decrease in the probability that the focal child has seen his or her father at least once a month in the past year and also with an increase in both the likelihood that the mother received child support and the amount of child support she received. However, this interaction must be considered in the context of the main effects of re-partnering and new births to obtain the full effect of having a new birth within the context of a social-father family. Overall, then, the results from this model suggest that: (1) maternal re-partnering in the absence of a new child is associated with a 39% lower probability of the focal child having seen his or her father in the prior year, as well as with the mother having received $233 less child support in the prior year; (2) a new birth in the absence of a social father in the household is not associated with yearly or monthly father-child contact, whether child support is received, or the amount of child

support received; (3) compared to those without a new partner or a new birth, a new birth while a mother lives with a social father is associated with a 47% lower probability that the focal child has seen his or her father in the past year (p = .001) and a 31% lower probability that the focal child has seen his or her father monthly (marginally significant; p = .078), but is not significantly associated with whether child support was received or its amount;11 and, (4) prior new births are associated with a higher probability of child support receipt and an larger amount of child support received, but not are associated with father-child contact.12

Extensions

We also estimated several extensions to our primary models. First, for mothers who reported having a new birth, but not having a partner or spouse in the household, data limitations prevented us from confirming that the new birth was with someone other than the focal child's biological father. Thus, we re-estimated our models using a subsample of cases in which we excluded any observations in which the mother had a new birth but had never lived with a social father, assuming that these births may be from the focal child's father. These results, presented in Table 3, are generally consistent with our primary results, with the exception that the coefficient on the re-partnering*new birth interaction term was positive and marginally significant with regard to any child support received in our primary model, but is nonsignificant (with a relatively small negative coefficient) in the supplemental model.

Second, our child support variables measure only whether the mother received any child support in the past year and how much support she received. As such, they do not necessarily reflect child support received on behalf of the focal child or that paid by the focal child's father. To increase our confidence that our estimates reflect only child support received from the focal child's father and on behalf of the focal child, we limited our sample to families in which the focal child was the first-born child to the mother and the mother had no additional births prior to the current observation wave. For consistency, we also re-estimated the father-child contact models using this sample. The results for child support, shown in Table 4, show no statistically significant associations, although this may reflect decreased statistical power. The results in this sub-sample for contact are generally consistent with those for the full sample.

Third, for consistency with prior work, we estimated supplemental models using standard regressions and random-effects regressions. Results (not shown) revealed a considerably larger number of statistically significant associations than were found in our primary analyses. These associations were nearly always in the same direction as those found using the fixed-effects regressions which, as discussed above, are our preferred model given that their estimates are likely to be less biased than those of the standard and random-effects regressions.

Fourth, we tested whether there were differences in the associations of interest by whether a mother had re-partnered into marriage or cohabitation. Of the 8 tests of the equality of the marriage and cohabitation coefficients (one testing the equality of the main effect coefficients and one testing the equality of the interaction coefficients in each of the 4

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[11]These estimates were computed by summing the mother re-partnered, mother had new birth, and mother re-partnered*mother had new birth coefficients, then exponentiating the sum to produce an odds ratio. Note, however, that only the estimate for monthly father–child contact (marginally significant; p =.078) statistically differs from that for living with a social father without having a new-partner birth.

[12]In supplemental analyses, we re-estimated the model for monthly father-child contact using only the subsample of families in which the focal child had seen his or her father in the prior year and the model for child support amount using only the subsample of families in which the mother received any child support in the prior year. Results (not shown) were qualitatively consistent with those from our primary models.

models), 6 were nonsignificant. The two significant differences suggested that, on average, having re-partnered into marriage and having a new birth was associated with a lower probability of yearly father-child contact than was having re-partnered into cohabitation and having a new birth, and that having re-partnered into marriage, in general, was associated with a lesser amount of child support received than was having re-partnered into cohabitation. Thus, while most coefficients are similar for having re-partnered into cohabitation and into marriage, those that differ suggest that marriage is more strongly related to father investments than is cohabitation, as expected. Fifth, we estimated separate models for families in which the biological parents lived within 100 miles of each other and those in which they lived more than 100 miles apart. Results for both groups were qualitatively similar. Finally, we estimated separate models for families in which the focal child was born within and outside of marriage;13 again, results were qualitatively similar for the two groups.

Discussion

Relatively few studies have examined associations of maternal re-partnering and new-partner births with nonresident father visitation and child support payment, and the handful of existing studies have produced mixed findings. We add to the existing literature by using fixed-effects models and data from the NLSY to examine these associations. To the best of our knowledge, the NLSY data have not previously been used to examine the associations among maternal re-partnering, new-partner births, father-child contact, and child support (see Cheadle, et al., 2010, however, for information on the relationship between maternal re-partnering and paternal investments). Yet, these data offer a population-based sample through which we are able to observe a large group of families over a 20-year period. This allows us to track families in which focal children were born both within and outside of marriage, as well as those living in urban, suburban, and rural settings; we are also able to observe children from birth to age 14. In contrast, much of the prior literature has focused on young children, most frequently from birth to age 5, who were born to unmarried parents in urban areas.

We hypothesized that fathers' investments would decrease when mothers re-partnered or had new-partner births. We expected these effects to be more pronounced with regard to visitation than (formal) child support payment given that the child support enforcement system is likely to discourage some fathers from decreasing their payments of formal support. Our expectations regarding informal child support payments were not as strong, although we suspected it may decline as a result of maternal re-partnering or a new-partner birth. On the whole, we found maternal re-partnering to be associated with a decrease in both yearly father-child contact and total child support (formal plus informal) received by the mother. These associations were relatively large: children were about 40% less likely to have seen their father in the prior year once their mother re-partnered than when she was single, and the amount of child support received by the mother decreased by approximately $200 a year (approximately 13% of the mean child support payment for our full analysis sample) after she re-partnered. In addition, maternal new-partner fertility within the context of a (co-resident) re-partnership was associated with a decrease in the probability of monthly father-child contact (marginally significant at $p < .10$), but was not associated with an additional decrease in yearly father-child contact14 or with child support receipt. Children whose mothers were re-partnered and also had a new-partner birth were 31% less likely to

[13]Measured by whether the mother reported being married at the time of the first interview following the child's birth.
[14]Whereas children whose mothers re-partnered but did not have a new birth were 39% less likely to have had yearly contact with their father after the re-partnership than before, those whose mother were re-partnered and also had a new birth were 47% less likely to have seen their father in the last year. However, these estimates do not significantly differ from one another.

have seen their father monthly in the past year once these changes had taken place than beforehand.[15]

Our finding regarding the associations between maternal re-partnering and father-child contact over the past year is consistent with that of Tach et al., (2010), which we believe to be the most rigorous study of these associations to date. However, the magnitude of their estimate is larger than that of ours. Results from their fixed-effects models suggest that maternal re-partnering is associated with an 81% lower likelihood of father-child contact in the last year; our results suggest a 39% lower likelihood. There are several possible explanations for this difference. One is that their sample consists only of children born to unmarried parents, whereas ours consists of children born to both married and unmarried parents. It is possible that the influence of maternal re-partnering on father child-contact is larger after an unmarried birth than after a married birth. However, we did not find this to be the case when we estimated separate models for children born within and outside of marriage. Another possibility is that they focus only on children age 5 and younger, whereas we focus on children younger than 14. It is well known that non-resident father-child contact decreases as children age (see, for example, Edin, Tach, & Mincy, 2009; see also Cheadle et al., 2010). As such, the smaller effect found in our study may, at least in part, reflect that the children in our sample tend to be older (8.5 years old, on average) and may therefore have had lower levels of father-child contact to begin with.[16]

Results from our study and that of Tach and colleagues (2010) differ with regard to maternal new-partner births. They find new-partner births to be associated with a 62% (marginally significant) decline in yearly father-child contact; we find no association with yearly father-child contact. This, too, may reflect differences in the ages of children in the two samples if, for instance, the effects of new-partner births are larger when such births occur in closer proximity to the focal child's birth (and the break-up of his or her parents). We attempted to test this possibility by re-estimating our models using only observations of children when they were age 5 and under and found no association for this group, either. We note, however, that observations when children were age 5 and under constituted less than 20% of our sample, limiting our confidence in these estimates. It is also possible that this inconsistency in the results of the two studies reflects a difference in the effect of maternal new-partner births between families whose children were born within and outside of marriage. Again, however, we did not find this to be the case in our sample.

Results for monthly father-child contact from the Tach et al. (2010) study and ours are not directly comparable given that our outcome is defined as whether the nonresident father had monthly contact with the child and theirs is defined as the number of days of contact. Nonetheless, it is worth noting that they find maternal re-partnering to be associated with a decrease in the number of days of contact, whereas we find no association between maternal re-partnering and whether there was monthly contact in the past year; neither study finds a main effect of maternal new-partner births. However, our results reveal that having a new birth in the context of a (co-resident) re-partnership is associated with a decreased likelihood that the nonresident father had any monthly contact with the child in the past year. Tach and colleagues (2010) do not test this interaction. As such, it is possible that their finding of an

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[15]In addition, we found the number of new births to a mother since entering our analysis sample (being observed without the focal child's biological father in her household) to be associated with an increased likelihood of child support receipt and a greater amount of child support received. This makes sense given that the probability of receiving a child support order and the total amount of child support awarded should mechanically increase with the number of children a mother has had.

[16]Though not directly comparable, it is worth noting that 87% of the fathers in Tach et al.'s (2010) sample had contact with the focal child during (approximately) the year prior to the age 1 interview, whereas 79% of the fathers in our sample had contact with the focal child in the year prior to the first interview at which their mother reported being single or living with a social father.

adverse association between maternal re-partnering and the frequency of monthly father-child contact is driven by mothers who both re-partnered and had a new birth.

Turning to child support, we find no association of maternal re-partnering and whether a mother receives any support, a result that is largely consistent with previous research (Garasky et al., 2009; Seltzer, 1991). We do, however, find maternal re-partnering to be associated with a decrease in the amount of support received, perhaps because fathers decrease the amount of informal support they provide. Consistent with findings from earlier studies (Bartfield & Meyer, 2003; Meyer et al., 2005; Nepomnyaschy, 2007), we find no associations between new-partner births and child support receipt.

Our analyses have several limitations that should be considered when interpreting our results. First, like the majority of existing studies in this area, our data are based only on mothers' reports. This is not ideal for several reasons. To begin with, because mothers were not asked about fathers' new partnerships and fetility, it prevents us from considering the influence of paternal re-partnering and new-partner births on fathers' investments in nonresident children. Notably, however, there is considerably more existing research in this area than with regard to maternal re-partnering. Moreover, Tach et al. (2010) find larger associations for maternal than paternal re-partnering. Thus, our focus on maternal re-partnering and new-partner births may be particularly salient. An additional problem associated with a lack of father-reported data is that prior research suggests that mothers' and fathers' reports differ in terms of both father-child contact and child support payment, such that fathers tend to report higher absolute levels of both (Schaeffer, Seltzer, & Dykema, 1998; Schaeffer, Seltzer, & Klawitter, 1991; Seltzer & Brandreth, 1995). Yet, despite differences in the absolute levels reported by mothers and fathers, in general, patterns found using each type of report tend to be similar (see, for example, Berger, Brown, Joung, Melli, & Wimer, 2008). Furthermore, Tach et al., (2010, footnote 3), compare mother and father reports of father-child contact approximately one year after a non-marital birth and find 94% agreement for whether the father had seen the child in the past year and 91% agreement for whether the father had seen the child at least once a month in the last year, providing some evidence that mother and father reports on such broad measures of visitation may not be overly inconsistent.

Second, for cases in which single mothers (those not living with a partner or spouse) in our data report a new birth, we are unable to verify whether the birth is to the focal child's father or to another partner. To address this limitation, we re-estimated our models using a subsample of observations in which we excluded families in which the mother had a new birth but had never lived with a social father. The conclusions drawn from our primary analyses were affirmed.

Third, our child support measure is limited in that it taps only whether a mother received child support and how much support she received, and is not linked to any particular children or fathers. To address this concern, we re-estimated our models using only the subsample of families in which the focal child was the first birth to the mother and the mother had not had an additional birth prior to the current interview wave (i.e., the focal child was, prior to a new-partner birth, an only child). We found that our results did not differ. Our child support measure is also limited in that it does not allow us to separately identify formal and informal payments. This is particularly problematic if the two types of payment have differential associations with maternal re-partnering and new-partner births.

Fourth, the child-wave observations in our data take place at two-year intervals. As such, within each two-year period, we cannot determine if a maternal re-partnership or new-partner birth preceded or followed a change in non-resident father visitation or child support

payment. Thus, we cannot be sure of the causal order of the associations of interest. Fifth, we cannot determine whether changes in nonresident father visitation that are associated with maternal re-partnering or new-partner births reflect voluntary changes in fathers' behaviors as opposed to changes in maternal gate-keeping. Sixth, like all studies in this area, our estimates are subject to omitted variable bias. Of particular concern in our study are time-varying omitted factors such as maternal gate-keeping behaviors, paternal re-partnering and new-partner births, and parental relationship quality. Finally, it is important to note that our analyses focus only on the frequency of father-child contact and are silent with regard to the nature or quality of father-child interactions or their impact on children's wellbeing.

Despite these limitations, this study makes an important contribution to what we know about associations of maternal re-partnering and new-partner births with nonresident father investments in children. Our results lend support to Tach et al.'s (2010, p. 197) conjecture that maternal transitions into new partnerships, along with associated new-partner births, may be a "driving force behind the large declines in father involvement that occur over time." However, our analyses suggest that this pattern may be applicable to a broader, more diverse, and more nationally representative group of children than children under 5 who were born to unmarried parents in urban settings. That we find no evidence that these changes differ for children born to married and unmarried parents suggests that they are not likely the result of differing legal contexts in which divorced and unmarried fathers operate; nor does it suggest that subsequent partnerships for mothers who were unmarried at a child's birth are "especially vulnerable to the threat of ongoing involvement of a former partner, even if only for the purposes of seeing the child," as Tach and colleagues (2010, p. 200) hypothesize. Rather, our results suggest similar patterns of change in father-child relationships across family types. However, additional research is needed to confirm or reject this hypothesis given that the magnitude of their estimates is consistently larger than that of ours.

What then are the implications of this work for public policy? Given that a sizeable proportion of children will experience maternal re-partnering and associated new-partner births, coupled with evidence that non-resident father involvement may positively influence children's wellbeing (Amato & Gilbreth, 1999; Bauserman, 2002; Greene & Moore, 2000), our findings suggest the importance of effective child support enforcement policies. We find different patterns for the two types of paternal investments we investigate. Father contact generally declines after mothers re-partner (or have a birth with their new partner), but child support shows relatively modest declines. Thus, nonresident fathers largely maintain their financial support of their children, and this may be because of the effectiveness of child support enforcement.

While the effectiveness of healthy marriage programs remains a matter of debate, our results highlight the potential importance of including content on the benefits of nonresident father involvement with children when working with mothers and their new partners. They also imply that both healthy marriage programs and fatherhood initiatives should work to engage mothers, their new partners, and nonresident fathers in strategies to promote family processes that further such involvement, with the aim of advancing child wellbeing in complex families. Furthermore, ongoing biological father investments may be particularly important in a context in which maternal re-partnerships tend to be temporary or unstable in nature. To this end, future research should focus on the extent to which the (in)stability of maternal re-partnerships may influence nonresident father investments and children's wellbeing.

Highlights

Research suggests that *paternal* re-partnering and new-partner fertility are associated with decreased nonresident father investments in children. Few studies, however, have examined the influence of *maternal* re-partnering and new-partner births on nonresident father investments. We use data from the National Longitudinal Survey of Youth to examine associations of maternal re-partnering (through cohabitation or marriage with a new partner) and new-partner births with nonresident father visitation and child support payments. Results suggest that maternal re-partnering is associated with a decrease in both yearly father-child contact and child support received by the mother. New-partner fertility for mothers who are co-residing with a partner is associated with an additional decrease in monthly father-child contact, but does not have an additional influence on yearly father-child contact or child support receipt.

Acknowledgments

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Table 1

Descriptive Statistics by maternal re-partnering and new-partner birth status

	Mother did not re-partner	Mother re-partnered	Mother did not have new birth	Mother had new birth	Mother re-partnered, no new birth	Mother re-partnered, new birth
Father investment measures:						
Father-child contact last year	0.74	0.63^a	0.71	0.69	0.63	0.60
Monthly father-child contact last year	0.47	0.35^a	0.43	0.45^b	0.37	0.33
Child support received	0.37	0.40^a	0.39	0.29^b	0.40	0.39
Child support amount (2005$s)	1511.85 (3310.81)	1690.10^a (3462.14)	1673.53 (3481.41)	975.05^b (2501.15)	1703.63 (3497.16)	1621.02 (3278.90)
Time-varying covariates:						
Child Age	8.05 (3.68)	9.56^a (3.06)	8.96 (3.25)	6.01^b (4.16)	9.84 (2.87)	8.14^c (3.54)
Mother Age	32.04 (5.37)	32.72^a (5.38)	32.68 (5.41)	29.87^b (4.55)	33.10 (5.43)	30.77^c (4.67)
Mother has < high school degree	0.24	0.21^a	0.23	0.27^b	0.20	0.22
Mother has high school degree	0.48	0.50^a	0.48	0.51^b	0.50	0.54^c
Mother has > high school degree	0.28	0.29	0.29	0.22^b	0.30	0.24^c
Number of adults in HH	1.53 (0.98)	2.16^a (0.50)	1.70 (0.90)	1.79^b (0.96)	2.16 (0.51)	2.13 (0.45)
Number of children in HH	2.60 (1.38)	2.60 (1.20)	2.51 (1.29)	3.12 (1.43)	2.50 (1.19)	3.12^c (1.12)
Non-mother's children in HH	0.10	0.07^a	0.09	0.10	0.07	0.07
Income (2005 $s)	23878.92 (16825.80)	39707.31^a (27117.94)	29236.90 (21855.46)	25228.54^b (20516.42)	40431.81 (27129.07)	36007.95^c (26775.40)
Welfare receipt	0.38	0.19^a	0.29	0.46^b	0.18	0.26^c
Work hours	1111.06 (1001.00)	1244.38^a (973.85)	1223.82 (997.57)	754.04^b (879.45)	312.55 (971.63)	896.28^c (909.19)
Proportion of child's life without biological father in HH	0.76 (0.31)	0.76 (0.25)	0.75 (0.30)	0.80^b (0.29)	0.76 (0.25)	0.76 (0.26)
Inconsistent reports of proportion of life with father	0.33	0.27^a	0.32	0.29^b	0.27	0.29
Parents live > 100 miles apart	0.26	0.36^a	0.29	0.27^b	0.36	0.37
Number of prior new births	0.39 (0.63)	0.39 (0.65)	0.40 (0.64)	0.30^b (0.61)	0.39 (0.65)	0.36 (0.63)
Time-invariant covariates:						
Child is male	0.50	0.48	0.50	0.50	0.48	0.49

	Mother did not re-partner	Mother re-partnered	Mother did not have new birth	Mother had new birth	Mother re-partnered, no new birth	Mother re-partnered, new birth
Non-black, Non–Hispanic	0.27	0.50^a	0.35	0.29^b	0.50	0.49
Black	0.56	0.28^a	0.47	0.53^b	0.28	0.29
Hispanic	0.17	0.22^a	0.18	0.18	0.22	0.22
Birth order	2.05 (1.22)	1.85^a (1.06)	1.99 (1.17)	1.98 (1.22)	1.87 (1.07)	1.73^c (0.97)
Low birth weight	0.11	0.08^a	0.10	0.12^b	0.08	0.11
Child disabled	0.12	0.11	0.12	0.10^b	0.12	0.11
US born	0.95	0.95	0.95	0.95	0.95	0.94
Mother age at birth of first child	20.39 (4.26)	20.31 (4.10)	20.37 (4.22)	20.37 (4.19)	20.36 (4.15)	20.07 (3.86)
Lived with both parents at age 14	0.51	0.59^a	0.54	0.48^b	0.59	0.57
Had fight at work or school	0.25	0.21^a	0.23	0.25	0.21	0.20
Self-esteem	3.13 (0.39)	3.15^a (0.39)	3.14 (0.39)	3.11^b (0.39)	3.15 (0.39)	3.15 (0.39)
Locus of control	9.25 (2.30)	9.06^a (2.41)	9.17 (2.32)	9.30^b (2.40)	9.09 (2.41)	8.93 (2.40)
Aptitude (AFQT)	24.13 (22.16)	31.80^a (25.82)	27.11 (23.90)	22.67^b (21.38)	32.20 (25.87)	29.77^c (25.49)
Married at FC's birth	0.36	0.55^a	0.44	0.29^b	0.56	0.51^c
Child-wave observations	10,382	4,433	12,517	2,298	3,707	726
Number of children	3,655	2,192	4,382	1,741	2,017	618

Note: 14,815 child-wave observations of 4,567 children. Proportions or means (and standard deviations) presented. Children whose mothers re-partner may appear in both of the first two columns—they will appear in the first column for interview waves in which their mother is single and in the second column for interview waves in which their mother is living with a partner (social father); children appear in column four for those waves in which their mother reported having had a new birth, but otherwise appear in column three. For both time-varying and time-invariant characteristics, each child-wave observation is counted once in calculating the means and proportions presented here.

^{a}Significantly different from "mother did not re-partner" at p<.05.

^{b}Significantly different from "mother had no subsequent children" at p<.05.

^{c}Significantly different from "mother re-partnered, no new birth" at p<.05.

Table 2

Maternal re-partnering, new births, and nonresident father investments in children

	Father-Child Contact Last Year		Monthly Father-Child Contact Last Year		Any Child Support Received		Child Support Received (2005 $s)
	Logit		Logit		Logit		OLS
	O.R.	β (S.E.)	O.R.	β (S.E.)	O.R.	β (S.E.)	β (S.E.)
Model 1: Re-partnering							
Mother re-partnered	0.58 ***	−0.54 *** (0.11)	0.90	−0.10 (0.12)	0.91	−0.09 (0.10)	−202.06 ** (75.22)
Model 2: New birth (with number of prior new births)							
Mother had new birth	0.99	−0.01 (0.13)	1.03	0.03 (0.14)	0.99	−0.01 (0.12)	−50.69 (92.42)
Number of prior new births	0.90	−0.11 (0.12)	0.78 +	−0.24 + (0.13)	1.68 ***	0.52 *** (0.11)	239.16 ** (86.25)
Model 3: Re-partnering and new birth							
Mother re-partnered	0.58 ***	−0.54 *** (0.11)	0.90	−0.10 (0.12)	0.91	−0.10 (0.10)	−199.85 ** (75.36)
Mother had new birth	1.02	0.02 (0.13)	1.04	0.04 (0.14)	1.00	0.00 (0.12)	−32.84 (92.64)
Number of prior new births	0.92	−0.09 (0.12)	0.79 +	−0.23 + (0.13)	1.70 ***	0.53 *** (0.11)	250.59 ** (86.33)
Model 4: Re-partnering and new birth with interaction							
Mother re-partnered	0.61 ***	−0.50 *** (0.12)	1.00	−0.00 (0.12)	0.86	−0.15 (0.10)	−233.63 ** (78.54)
Mother had new birth	1.10	0.10 (0.15)	1.23	0.20 (0.15)	0.90	−0.11 (0.14)	−107.19 (104.68)
Mother re-partnered *Mother had new birth	0.79	−0.24 (0.20)	0.57 **	−0.57 ** (0.22)	1.36 +	0.30 + (0.18)	207.98 (136.40)
Number of prior new births	0.93	−0.07 (0.12)	0.82	−0.20 (0.13)	1.65 ***	0.50 *** (0.12)	236.88 ** (86.79)

Note: 14,815 child-wave observations of 4,567 children. All models include child fixed effects and control for all time-varying covariates listed in Table 1.

*** p<.001;

** p<.01;

* p<.05;

+ p<.10.

Table 3

Maternal re-partnering, new births, and non-resident father investments in children, excluding families in which the mother had a new birth since the last interview and no social father has ever been present

	Father-Child Contact Last Year		Monthly Father-Child Contact Last Year		Any Child Support Received		Child Support Received (2005 $s)
	Logit		Logit		Logit		OLS
	O.R.	β (S.E.)	O.R.	β (S.E.)	O.R.	β (S.E.)	β (S.E.)
Model 4: Re-partnering and new birth with interaction							
Mother re-partnered	0.61 ***	−0.49 *** (0.12)	0.98	−0.02 (0.13)	0.87	−0.14 (0.11)	−250.96 ** (84.02)
Mother had new birth	1.26	0.23 (0.39)	2.07	0.73 (0.56)	1.28	0.25 (0.40)	151.56 (306.02)
Mother re-partnered *Mother had new birth	0.79	−0.23 (0.42)	0.36 +	−1.02 + (0.59)	0.90	−0.11 (0.43)	−132.10 (322.74)
Number of prior new births	1.05	0.05 (0.15)	0.80	−0.22 (0.16)	1.53 **	0.43 ** (0.14)	173.65 + (104.23)

Note: 13,330 child-wave observations of 4,450 children. All models include child fixed effects and control for all time-varying covariates listed in Table 1.

***
p<.001;

**
p<.01;

*
p<.05;

+
p<.10.

Table 4

Maternal re-partnering, new births, and non-resident father investments in children, sample of first born children with no prior new births

	Father-Child Contact Last Year		Monthly Father-Child Contact Last Year		Any Child Support Received		Child Support Received (2005 $s)
	Logit		Logit		Logit		OLS
	O.R.	β (S.E.)	O.R.	β (S.E.)	O.R.	β (S.E.)	β (S.E.)
Model 4: Re-partnering and new birth with interaction							
Mother re-partnered	0.41 ***	−0.90 *** (0.24)	0.90	−0.11 (0.27)	0.88	−0.12 (0.20)	−119.13 (137.77)
Mother had new birth	0.96	−0.04 (0.40)	0.47 +	−0.76 + (0.45)	1.25	0.23 (0.35)	93.16 (238.46)
Mother re-partnered *Mother had new birth	0.50	−0.69 (0.55)	0.94	−0.06 (0.57)	1.48	0.39 (0.44)	101.27 (294.32)
Number of prior new births	--	--	--	--	--	--	--

Note: 4,526 child-wave observations of 1,988 children. All models include child fixed effects and control for all time-varying covariates listed in Table 1.

***
p<.001;

**
p<.01;

*
p<.05;

+
p<.10.