



**QUEEN'S
UNIVERSITY
BELFAST**

Nonresident Father Involvement with Children and Divorced Women's Likelihood of Remarriage

McNamee, C. B., Amato, P., & King, V. (2014). Nonresident Father Involvement with Children and Divorced Women's Likelihood of Remarriage. *Journal of Marriage and Family*, 76(4), 862-874.
<https://doi.org/10.1111/jomf.12118>

Published in:
Journal of Marriage and Family

Document Version:
Peer reviewed version

Queen's University Belfast - Research Portal:
[Link to publication record in Queen's University Belfast Research Portal](#)

Publisher rights

© 2016 Wiley & Sons. This is the peer reviewed version of the following article: McNamee, C. B., Amato, P. and King, V. (2014), Nonresident Father Involvement With Children and Divorced Women's Likelihood of Remarriage. *Journal of Marriage and Family*, 76: 862–874, which has been published in final form at <http://onlinelibrary.wiley.com/doi/10.1111/jomf.12118/abstract> This article may be used for non-commercial purposes in accordance with Wiley Terms and Conditions for Self-Archiving.

General rights

Copyright for the publications made accessible via the Queen's University Belfast Research Portal is retained by the author(s) and / or other copyright owners and it is a condition of accessing these publications that users recognise and abide by the legal requirements associated with these rights.

Take down policy

The Research Portal is Queen's institutional repository that provides access to Queen's research output. Every effort has been made to ensure that content in the Research Portal does not infringe any person's rights, or applicable UK laws. If you discover content in the Research Portal that you believe breaches copyright or violates any law, please contact openaccess@qub.ac.uk.

Open Access

This research has been made openly available by Queen's academics and its Open Research team. We would love to hear how access to this research benefits you. – Share your feedback with us: <http://go.qub.ac.uk/oa-feedback>

Nonresident Father Involvement with Children and Divorced Women's Likelihood of Remarriage

Catherine B. McNamee, Paul Amato,* and Valarie King**

Authors' pre-print

Paper published in: *Journal of Marriage and Family* 76 (August 2014): 862–874
DOI:10.1111/jomf.12118

School of Sociology, Social Policy and Social Work, Queen's University Belfast, 6 College Park, Belfast, BT7 1NN, Northern Ireland, U.K. (C.McNamee@qub.ac.uk)

*Department of Sociology, Pennsylvania State University, 306 Oswald Tower, University Park, PA 16802-6208.

**Department of Sociology, Pennsylvania State University, 415 Oswald Tower, University Park, PA 16802-6210.

Key Words: child support, former spouse relations, nonresidential parents, parental investment/involvement, remarriage, union formation.

This research was supported by funding from the Eunice Kennedy Shriver National Institute of Child Health and Human Development to the Population Research Institute at The Pennsylvania State University for Population Research Infrastructure (R24 HD041025) and Family Demography Training (T-32HD007514).

ABSTRACT: Although remarriage is a relatively common transition, we know little about how nonresident fathers affect divorced mothers' entry into remarriage. Using the 1979-2010 rounds of the National Longitudinal Study of Youth 1979, we examined the likelihood of remarriage for divorced mothers ($N = 882$) by nonresident father contact with children and payment of child support. The findings suggest that maternal remarriage is positively associated with nonresident father contact but not related to receiving child support.

KEYWORDS: Child support; Former spouse relations; Nonresidential parents; Parental investment/involvement; Remarriage; Union formation

Although remarriage rates declined in the 1980s and 1990s, the majority of people continue to remarry following marital dissolution (Bramlett & Mosher, 2002; Cruz, 2012). Most divorced men and women remarry fairly quickly, with the average duration between divorce and remarriage being about four years (Kreider & Ellis, 2011, table 8). As Cherlin (2009) pointed out, American culture places a high value on marriage, and despite personal setbacks and disappointments, many Americans marry multiple times during their lives. Indeed, about one third of all marriages in 2010 involved a remarriage for one or both partners (Cruz, 2012).

Previous studies have identified several consistent predictors of remarriage for divorced women (Bramlet & Mosher, 2002; Folk, Beller, & Graham, 1992; Goldscheider & Sassler, 2006; McNamee & Raley, 2011; Shafer & James, 2013; Stewart, 2010). These predictors include being young at the time of divorce, having a college education, being employed, and living in the southern region of the US. In addition, remarriage is less common for African Americans, the poor, and mothers who conceived or gave birth prior to marrying. It is not clear whether having children affects the likelihood of remarriage. Some studies show that remarriage is more likely when women have children, some studies show that remarriage is less likely, and yet others suggest that the association is contingent on other factors. These discrepant findings may reflect conflicting effects of children. On the one hand, some custodial mothers may be motivated to remarry because their new husbands can assist with the economic support and supervision of children (Morrison & Ritualo, 2000; Smock, Manning, & Gupta, 1999). On the other hand, some men may be reluctant to take on the economic and social responsibilities of the stepfather role, thus decreasing the attractiveness of mothers in the remarriage market.

Although rarely considered in previous studies, the nonresident biological father's relationship with his children following divorce may be an additional factor that affects the custodial mother's likelihood of remarriage. As we argue below, one can hypothesize either

positive or negative influences of father involvement on maternal remarriage. After developing our hypotheses, we draw on multiple waves from the National Longitudinal Study of Youth 1979 (NLSY79) to assess these ideas. Despite increases in joint physical custody, mothers continue to be the main residential parent in 82% of cases (Grall, 2011). For this reason, we focus on remarriages among divorced mothers (rather than fathers) with dependent children.

BACKGROUND

Because few social norms exist to guide the behavior of stepfathers, the stepfather-stepchild relationship is complex and variable (Cherlin, 1978). Despite some ambiguity in expectations, however, most stepfathers contribute significant amounts of time and money to their stepchildren (Marsiglio, 2004; Morrison & Ritualo, 2000). The extent to which men are willing to assume these responsibilities and, correspondingly, the extent to which mothers wish to share the parental role with new husbands, is likely to depend on a variety of factors, in addition to the feelings that partners may have for one another.

We argue that many divorced mothers and their new romantic partners consider the relationship between the nonresident biological father and his children when contemplating marriage. Because almost no research has addressed this topic, it remains under-theorized. Nevertheless, several theoretical perspectives are helpful in thinking about this topic. A family systems perspective, for example, focuses on the interconnectedness of family members and the mutual influences among them (Kantor & Lehr, 1975; Minuchin, 1974). The complexity of post-divorce relationships provides a context to think about families as connected systems. Divorce creates separate households, and parents may no longer view their former spouses as family members. Nevertheless, shared children provide a continuing familial connection between divorced parents. And when minor children are involved, paternal involvement (as reflected in

frequency of contact and payment of child support) has direct consequences for many aspects of the custodial mother's life.

We also draw on exchange theory, which assumes that individuals routinely evaluate the costs and rewards of their social relationships, as well as the potential costs and benefits of relationship alternatives (Homans, 1974; Sabatelli & Shehan, 1993; Thibaut & Kelly, 1959). Relationships that are high in benefits and low in costs, relative to their alternatives, are perceived as being attractive and worth pursuing. These evaluations are especially salient when making decisions about marriage—a relationship that requires a major long-term commitment. We argue that the involvement of nonresident fathers affects the perceived costs and benefits associated with remarriage following divorce. This focus, however, leads to two rival hypotheses. Depending on the salience of particular costs and benefits, a high level of nonresident father involvement may either increase or decrease the likelihood that mothers remarry following divorce.

Why might father involvement increase the likelihood of remarriage? Consider a case in which a nonresident father is completely uninvolved in his biological children's lives. Under these circumstances, the mother's new partner is likely to realize that, should they marry, he will be the main (perhaps sole) father figure in his stepchildren's lives. As such, he will be responsible for providing much of the assistance, supervision, and guidance usually assigned to biological fathers. Of course, some stepfathers adopt a "hands off" approach to dealing with stepchildren. But stepfathers vary a good deal in this respect, and some (as noted earlier) are highly involved in their stepchildren's lives (Marsiglio, 2004; Morrison & Ritualo, 2000). Similarly, if a nonresident father pays little or no child support, the potential stepfather will be responsible for much of the economic support of his stepchildren. A low level of nonresident

father involvement, therefore, can lower the attractiveness of the romantic relationship from the perspective of the potential stepfather.

In contrast, if the nonresident father spends a substantial amount of time with his children, much of the responsibility for supervision and guidance is removed from the mother's new partner. And if the nonresident father pays child support regularly, the potential stepfather will view the mothers' children as less of an economic burden. In addition, if the children spend a great deal of time with their nonresident biological father, the stepfather will have more time to share enjoyable activities with the mother *without* the children being present. In other words, a high level of involvement on the part of the nonresident father decreases many of the perceived costs and increases the perceived rewards of marriage from the perspective of the mother's new partner.

From the mother's perspective, the time that the nonresident biological father spends with his children reduces her burden of childcare and makes it easier for her to have a social life without her children. During the time that the biological father is supervising the children (during weekends, for example), the mother is free to venture into the world as a single woman, meet potential partners, and develop romantic relationships. If the nonresident father also pays child support regularly, she may have more disposable cash to go out, attend social events, and meet new people. In addition, frequent contact between nonresident fathers and children tends to occur when former spouses have an amicable and cooperative co-parental relationship (Sobolewski & King, 2005). Under these circumstances, the mother may be open to the idea of remarriage because, despite having had an unsuccessful marriage, she is confident that she can navigate a positive co-parenting arrangement with a new partner. In contrast, if the father fails to visit his children or pay child support, the mother may "wash her hands" of men (at least for the time being) and prefer to raise her children by herself.

Following exchange theory, a high level of nonresident father involvement has the potential to increase the benefits and decrease the costs of marriage for potential stepfathers and to increases opportunities for mothers to form new romantic ties. These considerations lead to the first hypothesis:

H1: A divorced custodial mother's likelihood of remarriage is positively associated with the father's (a) frequency of contact with children and (b) payment of child support.

Although good reasons exist for assuming that a high level of paternal involvement facilitates maternal remarriage, good reasons also exist for assuming the opposite conclusion. Some men may be unhappy to discover that the father of their new partner's children is present a lot of the time. They may feel uncomfortable, for example, interacting with the mother's ex-husband when he telephones, picks up the children, and returns the children to the household every week. Indeed, the potential stepfather may even discover that he is expected to attend events at which the biological father is present (such as children's birthday parties, holiday gatherings, and school events) and perhaps even sit at the same table with him. If the mother and her former husband have a cooperative co-parental relationship, the mother's new partner may become jealous and see the ex-husband as a continuing threat. In addition, when fathers are highly involved, potential stepfathers may perceive that they have less control over certain aspects of their lives. Many family plans and decisions, such as taking vacations or moving, will need to be coordinated with the nonresident father. Some men may prefer the mother's ex-husband to be completely out of the picture rather than constantly underfoot. Moreover, if the children remain strongly attached to their father, the potential stepfather may discover that it is difficult to establish authority over the children or become emotionally close to them. Indeed,

children may reject the new partner's presence and express a degree of hostility toward him. For all of these reasons, a high level of father involvement (especially with respect to contact) can increase the costs and lower the rewards of marriage from the perspective of the mother's new partner.

From the mother's perspective, a high level of father involvement may weaken her motivation for remarrying by reducing some of the benefits of remarriage. If a father is only minimally involved with his children, the mother may worry that her children do not have a dependable father figure. Moreover, if the father pays no child support, the mother may see remarriage as a necessary route to economic stability. But if the father is highly involved with his children and pays child support regularly, the mother may feel little need to rush into a second marriage. Instead, she may prefer to have a break from committed relationships, focus on her own needs, and take time to develop her social and human capital. In these cases, father involvement makes the alternative to remarriage—living independently as a single mother—more attractive. Because a high level of paternal involvement makes remarriage less necessary, it can slow down the mother's entry into a new committed union.

The notion that a high level of paternal involvement can increase the costs and lower the benefits of marriage for stepfathers and undermine mothers' motivation for remarrying lead to our second hypothesis:

H2: A divorced custodial mother's likelihood of remarriage is negatively associated with the father's (a) frequency of contact with children and (b) payment of child support.

In summary, although exchange theory focuses our attention on the costs and benefits of nonresident father involvement, it leads to contradictory hypotheses about how nonresident

father involvement affects the likelihood of maternal remarriage. This lack of clarity exists because it is not possible to specify *a priori* which costs and benefits are the most salient to mothers and their new partners. Instead, the effect of paternal involvement on maternal remarriage is an empirical question that can be answered only with recourse to data.

Can existing studies help to adjudicate between these rival hypotheses? Some cross-sectional studies have shown that maternal remarriage (or repartnering in more recent studies) is negatively associated with nonresident father contact (Amato, Myers, & Emery, 2009; Furstenberg, Nord, Peterson, & Zill, 1983; Seltzer & Bianchi, 1988). When interpreting these data, most researchers have assumed that maternal remarriage weakens some fathers' motivations to visit their children, presumably because these men feel "replaced" by stepfathers. Nevertheless, it also is possible to interpret these cross-sectional associations as evidence that divorced mothers are more likely to remarry when fathers are minimally involved. With only cross-sectional data, it is impossible to know the direction of causation. Moreover, a number of studies have found no influence of maternal remarriage on father contact (Cheadle, Amato, & King, 2010; King, 2009; Sobolewski & King, 2005).

Prior studies that have investigated the influence of child support on remarriage also have reported mixed findings. Folk, Graham, and Beller (1992) and Yun (1992) found that receiving child support was negatively associated with remarriage following divorce. In contrast, Cancian and Meyer (2007), using recent data from Wisconsin, found that mothers who received child support were less likely to be cohabiting with a new partner but no more (or less) likely to be remarried. Taken together, existing studies of visitation and child support provide relatively little evidence to adjudicate between our two rival hypotheses.

During the last few decades, the amount of contact between nonresident fathers and their children has increased (Amato, Myers, & Emery, 2009). Nonresident fathers also are more likely

to pay child support today than they did several decades ago (Amato, Myers, & Emery, 2009; Beller & Graham, 1993; Grall, 2011). If our reasoning is correct, these historical changes may have affected mothers' propensity to remarry following divorce, although the direction of this influence is unclear. To address this gap in our knowledge, we use multiple waves of data from the NLSY79 to estimate the effects of nonresident father contact and child support payment on the odds that divorced mothers remarry.

METHOD

Sample

We used data from the National Longitudinal Survey of Youth 1979 (NLSY79). The NLSY79 provides rich longitudinal data on a nationally represented cohort of men and women 14-22 years old in 1979 who were 45-53 years old in 2010, the most recently available survey year. The NLSY79 currently consists of 24 rounds of surveys collected annually from 1979 to 1994 and biennially from 1996 onwards.

The analytic sample consisted of mothers whose first marriages ended in separation or divorce during the study and were at risk of a second marriage. We limited the sample to women with children under the age of 18 in the household to focus on cases in which father involvement was most likely to be influential. One of the primary independent variable of interests, nonresident father contact, was introduced in the 1984 survey; therefore, our sample excluded women who remarried or had their last interview before this year. We also excluded women who had minor children with fathers other than ex-husbands to avoid complications associated with multiple nonresident fathers. (We included a few cases of women who had children with multiple fathers when the involvement of the non-marital nonresident father was inconsequential, such as when the child was no longer a minor or was deceased. In such cases we only considered the characteristics of ex-husbands and their shared children.) We determined the mother's

marital relationship to biological fathers using detailed marital and fertility history data. The final research sample consisted of 882 divorced mothers with minor children living in the household.

Measures

Mother's remarriage

Maternal remarriage was the major dependent variable and was measured with a time varying, binary indicator (0 = *no*, 1 = *yes*).

Nonresident Father Involvement

Two dimensions of nonresident father involvement were measured: (1) contact frequency and (2) payment of child support. Both of the nonresident father involvement measures were time-varying and based on mothers' reports. The NLSY79 measured nonresident father contact in 1984, 1985, and biennially from 1986 onwards. The response options were slightly modified after the 1984 survey to include one additional category; therefore we collapsed two response options into one category to have consistent ranges across surveys. The recoded variable for contact frequency ranged from 0 to 6, with higher numbers reflecting more frequent contact (0 = *never*, 1 = *once in past 12 months*, 2 = *2-11 times in the past 12 months*, 3 = *1-3 times a month*, 4 = *about once a week*, 5 = *2-5 times a week*, 6 = *almost every day*). We calculated nonresident father contact as the average frequency of contact for all the minor children living with the mother. (Inspection of the data revealed few instances in which father contact varied across different children within the same household in the same year.)

Child support was coded to indicate whether the mother received any money from the father for child support during the previous year (0 = *no*, 1 = *yes*). Although mothers also answered a question on the total amount of child support received, we did not use this information in the main analysis because the initial years of the NLSY79 combined child support with alimony. This variable also produced a large amount of missing data, presumably because

many mothers had difficulty recalling the specific amount received. Moreover, some previous research has shown the amount of child support is less important than whether mothers receive any child support at all in predicting maternal remarriage (e.g., Beller & Graham, 1993). We incorporate information on the amount received, however, in the discussion section.

Controls

Because women entered the sample in the year in which they separated from their spouses, duration was measured as the number of years since the date of separation (or the date of divorce if no separation was reported). We also include a quadratic term (duration squared) to account for possible curvilinearity in the association between time and remarriage. We started with the year of separation (rather than divorce) for several reasons. First, some groups, such as African Americans, tend to remain separated for extended durations (Bumpass, Martin, & Sweet, 1991; McCarthy, 1978; Morgan, 1988). For women with long separations, divorces may occur only when a remarriage is imminent. Second, compared with the date of divorce, the date of separation is usually a better marker of when people enter the dating (and remarriage) pool (South & Lloyd, 1995). We excluded cases from the sample in which women separated but later reconciled with their husbands, as well as women with separations of less than 12 months at the time of last interview to account for the possibility of reconciliation (Binstock & Thornton, 2003).

We also included a series of maternal variables that have been identified previously as predictors of remarriage: age, employment status, educational attainment, premarital births, race-ethnicity, and living in the South. Age of the mother was measured at the time of marital dissolution. Employment was time varying and measured the number of hours worked in the week prior to the survey interview. Hours were collapsed into three groups: not employed (0 hours), part-time employment (1 to 35 hours), and full-time employment (over 35 hours).

Educational attainment was measured at the time of marital dissolution and has three categories: not a high school graduate, high school graduate, and any postsecondary education. A variable reflecting premarital births was derived from a constructed NLSY79 dummy variable (0 = *no*, 1 = *yes*). This variable reflected whether the woman had a child before marrying, either with her ex-husband or, in some cases, with an earlier partner. Living in the South was measured at the initial interview (0 = *no*, 1 = *yes*). Race-ethnicity involved four categories: non-Hispanic White, non-Hispanic Black, Hispanic, and other non-Hispanic race.

Because our hypotheses framed children as continuing links between divorced parents, we also included two variables that referred to the divorced couples' children. Gender was a time-varying variable that focused on minor children living in the mother's household and was coded into three categories: all girls, all boys, and a combination of girls and boys. (An alternative version of this variable involved all minor children living in either the mother's or the father's household. This more inclusive variable produced identical results and is not discussed further.) The total number of children referred to all the children ever-born to the mother and her ex-husband. We relied on mother's marital and fertility histories to construct these variables.

We included two characteristics of the ex-husband that could potentially influence both his level of involvement and maternal remarriage: geographical distance between children and nonresident fathers and whether some (but not all) of the mother's children lived with the biological father. Distance from the father referred to how far the father lived from the mother's (and children's) household. Response options ranged from 1 to 4 with higher numbers indicating greater distances (1 = *within a mile*, 2 = *1-10 miles*, 3 = *11-100 miles*, 4 = *more than 100 miles*). The some children live with father variable captured whether any of the mother's children currently lived with the biological father (0 = *no*, 1 = *yes*). Specifically, this variable identified cases in which some children lived with the mother and other children lived with the father in the

same year. (A small number of cases [$n = 45$] in which all of the mother's biological children always resided with the father were omitted from the analysis.)

Analysis

Our analytical strategy involved discrete time-event history analysis, which is ideal for models that include both fixed and time-varying covariates (Allison, 1984). Person-years represented each year that the mother was single, starting with the year of separation. Cases were censored in the year when (a) the mother remarried, (b) the youngest child in the household reached the age of 18, (c) the last interview was conducted, or (d) the mother dropped out of the panel, depending on which occurred first. The 882 mothers in the sample generated a total of 6,683 person-years. A few children moved from the mother's to the father's household (and sometimes back again) prior to the mother's remarriage. To account for these changing circumstances, we removed person-years in which all children lived with the father, which reduced the number of observations for analysis to 6,420. (Omitting or including these person-years had no implications for the main findings, however, as we note below.)

To situate our measures within prior research on father involvement, and to provide evidence for the validity of our measures of nonresident father involvement, we conducted a preliminary analysis in which nonresident father contact and payment of child support served as dependent variables, using ordinary least squares and logistic analysis, respectively. The main analysis modeled the influence of nonresident father involvement (contact and child support) on the likelihood of maternal remarriage using an additive logistic regression approach. The initial model predicted remarriage from the maternal, child, and paternal characteristics (control variables). Next, we added the two nonresident father involvement variables: frequency of father contact and receiving child support. To illustrate the relationship between father contact and maternal remarriage more directly, we used the logistic regression equation to show how the

predicted annual probability of remarriage varied with the frequency of nonresident father involvement. Finally, for purely exploratory purposes, we examined models that included multiplicative interaction terms between all of the control variables and (a) father contact and (b) child support payment. This final analysis tells us, for example, if the estimated effect of child support payments depended on the mother's employment status or race.

Data were missing in some years because respondents failed to provide information. In addition, after 1994, data were collected every other year rather than every year. To provide annual estimates of variables like contact (and other time-varying variables) for the years without surveys, we relied on two strategies. First, we used data on the most recent level of contact to fill in the missing values. We then relied on multiple imputation with the ICE command in Stata to fill in all other missing values. Second, we relied on multiple imputation to fill in all missing data, including the biennial gaps. Preliminary analysis revealed that results based on the two procedures were essentially the same, so we present the results using the first procedure only. Because the amount of missing data was large for some time-varying variables (up to half of the observations for the father variables), we generated and combined 40 multiply imputed files, a number recommended by Graham, Olchowski, and Gilreath (2007) to stabilize standard errors and produce accurate significance tests.

RESULTS

Table 1 shows descriptive statistics for all variables used in the analysis. The first two columns show variable means and standard deviations for 876 mothers at time 1 (the year in which the separation or divorce occurred), and the second two columns show the corresponding statistics for the person-year file. (The person-year means exclude observations for years in which all children lived with fathers rather than mothers.) There are six mothers included in the full person-year sample (for a total of 882 mothers) that are excluded in time 1 because all children

lived with their fathers during the first observation year. The table (column 1) shows that two percent of mothers remarried within the first year of the divorce. The corresponding mean in the person-year file is .06, which indicates that the probability of maternal remarriage increased after the first year. The mean frequency of contact in the first year was 3.33, which falls between “1-3 times in the past month” and “about once a week.” The corresponding mean (2.84) was lower in the person-year file, due to a tendency for contact to decline with time. Only 27% of fathers paid child support in the first year following separation. This figure rose to 54% in the person-year file, which indicates that the frequency of child support increased after the first year. This figure is roughly comparable to other national estimates of child support compliance during the 1980s and 1990s (Amato, Myers, & Emery, 2009; Beller & Graham, 1993; Grall, 2011; Meyer, 1999). In addition, the average age of mothers in the first year following divorce was about 30 years. (Although not shown, the mean age of children was about five years at the time of separation.) Mothers had about two children, on average, evenly divided between boys and girls.

(Table 1 about here)

In a preliminary analysis, we regressed paternal contact and child support on all control variables using ordinary least squares regression and logistic regression, respectively. The level of contact declined with years since divorce, as noted earlier. Contact was more frequent when mothers were older, mothers were white rather than black, mothers were employed, fathers lived closer to their children, and some (but not all) children lived with their fathers. Unlike contact, fathers’ payment of child support increased over time. Payment also was more common when mothers were older, did not have a premarital birth, were high school graduates, were non-Hispanic white, and were employed full-time. In addition, mothers were more likely to receive child support when fathers visited frequently and were less likely to receive child support when some children lived with the fathers. All of these findings are consistent with earlier research on

contact and child support, and hence, provide support for the validity of our measures (Amato, Meyers, & Emery, 2009; Beller & Graham, 1993; Cheadle et al., 2010; Grall, 2011; Meyer, 1999; Stewart, 2010)

Table 2 shows the results of a logistic regression analysis with maternal remarriage serving as the dependent variable. Model 1 includes all of the covariates but not the two measures of nonresident father involvement. Maternal remarriage increased with years since divorce, although the squared term indicates that this trend slowed over time. Remarriage was associated with being younger (rather than older), living in the south, being non-Hispanic white (rather than black), and being employed full time. In general, these findings are consistent with the previous studies of remarriage reviewed earlier (e.g., Bramlet & Mosher, 2002; Folk, Beller, & Graham, 1992).

(Table 2 about here)

Model 2 adds the father involvement variables to the equation. The frequency of father contact was positively associated with remarriage ($p = .028$). The coefficient for child support, in contrast, was not statistically significant. These results suggest that frequent paternal contact, but not the payment of child support, enhanced mothers' chances of remarriage. Overall, father contact appeared to be the most important fatherhood variable in predicting maternal remarriage.

Based on this regression equation, we calculated predicted annual probabilities of remarriage for different levels of nonresident father contact with all covariates set at their means. Table 3 shows these predicted probabilities. The annual probability of remarriage doubled from .028 when there was no contact to .057 when contact occurred almost every day. Most observers would agree that this increase is large enough to be substantively important.

(Table 3 about here)

In a further series of models (not shown), we included interaction terms between all covariates and (a) contact and (b) child support. Although exploratory, this analysis revealed no fully significant or marginally significant interaction terms (all $p > .10$). Neither the positive association between contact and maternal remarriage, nor the absence of an association between child support and maternal remarriage, was contingent on the values of other variables in the analysis.

In a subsequent model (not shown), we included an additional 263 observations (person-years) for years in which all of the mother's children lived in the father's household. (These data were from cases in which children moved back and forth between their parents' households during the study years.) Contact was coded 6 (the maximum value) for these years. In this model, the coefficient for contact remained essentially the same ($b = .12$), but the standard error declined slightly, resulting in a lower probability value ($p = .009$). All of the other coefficients in the model were similar to those shown in Table 2.

In a final analysis (not shown), we considered the possibility that the associations between remarriage, contact, and child support changed over time. During the NLSY survey years (1979 to 2010) levels of nonresident father contact and child support increased (Amato, Myers, & Emery, 2009). These increases, as well as broader cultural changes, may have affected the links between contact, child support, and maternal remarriage in ways that are difficult to predict. To assess this possibility, we added the calendar year of each observation to the statistical models and examined interactions between year, contact, and child support in predicting maternal remarriage. These analyses indicated that calendar year did not interact with contact or child support in predicting maternal remarriage (both $p > .10$). We obtained the same null results when we substituted the year of separation for the year of observation. We also obtained null results when we created a series of dummy variables to represent periods as well as

various divorce cohorts. These analyses indicated no historical trends in either the positive association between contact and remarriage or the lack of an association between child support and remarriage.

DISCUSSION

This study expands our knowledge of factors that influence divorced mothers' entry into remarriage. Although prior studies have pointed to custodial children as both a motivation and barrier for maternal remarriage, little is known about the influence of biological nonresident fathers. We found evidence to support our first hypothesis (maternal remarriage is positively associated with nonresident father involvement) with respect to frequency of contact with children. Even though divorce severs the relationship of husband and wife, these findings highlight how divorced parents remain connected through a complex family system via their shared children—a finding consistent with one of the basic assumptions of family systems theory (Minuchin, 1974). Our findings suggest the need for a broad definition of family when studying post-divorce romantic relationships. Because they are part of a larger system, fathers continue to influence many aspects of their ex-wives' lives, including, apparently, their likelihood of remarriage.

Our findings also are consistent with the notion that frequent nonresident father contact with children lowers the barriers and increases the rewards of remarriage for mothers and their new partners—fundamental concepts drawn from exchange theory. Nonresident father contact creates leisure time for mothers and opportunities to develop new relationships.

Correspondingly, new partners may be especially interested in having relationships with mothers who can provide private time (without children) on a regular basis. Moreover, men may be more willing to adopt the stepfather role when biological fathers remain physically present in their children's lives because this signals fewer parenting responsibilities for the stepfather.

Despite these benefits, a high level of contact between nonresident fathers and children also involves potential costs. Some potential stepfathers may not relish the prospect of interacting frequently with their new partners' ex-husbands. These men may resent the fact that travel plans and vacations need to be coordinated with their new partners' ex-husbands, and they may become jealous if relationships between mothers and former husbands are close. In addition, children may not welcome stepfathers with open arms if they continue to be close to their biological fathers. And mothers may feel less of a need to remarry if their former husbands continue to enact the father role frequently. A high level of nonresident father involvement, therefore, involves a complex set of costs and benefits for divorced mothers and their new partners. We did not have data on people's subjective ratings of costs and benefits, so we could not study this topic directly. Nevertheless, our results suggest that for most mothers and their new partners, the benefits of frequent paternal contact outweigh the costs.

Our results cast some light on the notions that marriage is a "package deal" and that men "exchange children" when they remarry (Furstenberg & Cherlin, 1991; Tach, Mincy, & Edin, 2010). This idea is based on the assumption that men are connected to children primarily through their spouses and partners. Consequently, when men remarry, they become less involved with children from their former marriages and more involved with their stepchildren. Because the current study does not have data on stepfathers' relationships with children from previous unions, our findings do not provide direct evidence either for or against this idea. The current study does show, however, that men are more likely to marry when the fathers of their new partners' children are highly involved. It appears, therefore, that many stepfathers prefer to "share" rather than "exchange" children.

In contrast to our results for contact, we found no evidence that the receipt of child support increased the probability of remarriage. These findings clash with two early studies (Folk

et al., 1992; Yun, 1992) but are consistent with a more recent study by Cancian and Meyer (2007). We suspect that the lack of an association between child support and maternal remarriage reflects the modest value of many child support payments. Despite a large amount of missing data, we coded the amount reported by NLSY79 mothers in each year and adjusted these values to 2012 dollars. Child support payments increased in value between 1980 and 2010 in constant dollars, with the mean being \$5,161 per mother per year, or about \$2,530 per child. Although this is not a trivial amount of money for a single mother, it is substantially less than the annual cost of raising a child, which was estimated to be between \$12,500 and \$14,700 in 2012 (Lino, 2012). Moreover, receiving child support was positively associated with maternal education and full-time employment. In other words, the mothers most likely to receive child support were those who needed it the least—a finding consistent with several other studies (Beller & Graham, 1993; Grall, 2011; Meyer, 1999; Stewart, 2010). Financial contributions from new spouses far exceed the value of child support payments (Bellar & Graham, 1993), and remarriage provides the surest path for improving financial wellbeing and reducing poverty for divorced women and their children (Morrison & Ritualo, 2000; Smock, Manning, & Gupta, 1999). These considerations suggest that child support payments may have had no consequences for maternal marriage in the present study because the amounts involved were not large enough to influence such an important decision.

Another possibility is that our rival hypotheses about child support are both true. That is, income from child support may make it easier for a mother to hire a babysitter, go out more often, and make herself more desirable to potential suitors. At the same time, it may improve a mother's financial independence and either make her less motivated to seek out a new partner or give her the flexibility to extend her search for a longer period. These two trends might “cancel” one another, leaving no net association between child support and remarriage.

One limitation of our research was the inability to address entry into post-divorce cohabitation due to incomplete cohabitation histories. Prior to the 2002 survey, the NLSY79 captured cohabitations only occurring at the time of the survey through the household roster. Because cohabitating relationships tend to be short-term, many of these unions were missed in the annual or biennial NLSY79 measurements. Consequently, the level of detail necessary for an adequate time-series analysis was not available. Nevertheless, one can theorize that father involvement is related differently to cohabitation and remarriage. Compared with remarriage, cohabiting relationships involve lower levels of commitment and greater instability—factors that are likely to alter the cost-benefit considerations of both the divorcee and the potential partner. In particular, frequent father contact may be less consequential for cohabitation than for remarriage, given that cohabiting partners (unlike married stepfathers) have few obligations to the mother's children. At the same time, a low level of child support may lead mothers to seek cohabiting partners (but not husbands) for short-term economic assistance—a finding consistent with Cancian & Meyer (2007). Although we could not address them in the current study, these ideas have the potential to provide a broader picture of post-divorce union formation and would make interesting starting points for new research.

Another limitation is the absence of information on the quality of the relationship between ex-spouses. The positive association between contact frequency and remarriage may partly reflect the quality of the co-parental relationship, given that mothers are more willing to foster contact when they get along well with fathers (Sobolewski & King, 2010). Having a harmonious and cooperative relationship with the ex-spouse may make the idea of entering a remarriage more appealing to the divorced mother as well as to potential suitors, although a recent study (McGene & King, 2012) found no correlation between a mother's remarriage and levels of cooperative coparenting. (Another possibility is that some mothers are especially adept

at maintaining amicable relationships, which could lead to positive co-parenting with the nonresident father as well as attracting new partners.)

Prior research has found that the quality of nonresident father-child interaction is more salient for child wellbeing (such as fewer behavioral problems and higher school achievement) than is the frequency of contact (Amato & Gilbreth, 1999; Carlson, 2006; Stewart, 2003). Similarly, the quality of father involvement (which is not available in the NLSY79) might affect how divorced mothers and their partners weigh the cost and benefits of nonresident father involvement. The extent to which a nonresident father provides non-cash support to his children also may be relevant. Although these topics are beyond the scope of the current study, they are potentially promising areas for future research. In addition, the NLSY sample of divorced fathers with child custody was too small to consider whether nonresident mother contact and payment of child support affect paternal remarriage, but this topic also could be addressed in a future study.

A final limitation is that our analysis does not allow causal claims about the effect of nonresident father involvement on maternal remarriage. Although we included most of the control variables used in previous studies of remarriage, unmeasured variables may influence father involvement as well as mothers' propensity to remarry. The present analysis provides suggestive evidence of a causal relationship, but future studies may be able to use methods (such as fixed effects regression models or instrumental variables) that better account for unmeasured heterogeneity.

CONCLUSION

This is the first study to consider the effect of nonresident father contact with children on maternal remarriage, and one of the first to consider the effect of child support payments. The current study furthers our understanding of factors that influence the likelihood of maternal remarriage following divorce and highlights the continuing connections between divorced

parents. Our main finding is that nonresident biological father contact with children (but not provision of child support) is positively associated with divorced mothers' likelihood of remarriage. Because our study is the first to report this finding, it needs to be treated cautiously until it can be replicated. If true, however, then some interesting implications follow.

During the last several decades, changes in the legal system have made it easier for fathers to spend significant amounts of time with their children following divorce (Emery, 2012). Courts in most states have adopted a greater willingness to replace sole mother custody with joint legal and physical custody. Moreover, some states have replaced the idea of sole physical custody with parenting plans to ensure that both parents have significant roles to play in their children's lives following divorce. An elevation of the remarriage rate for mothers may have been an unintended consequence of these legal changes. The percentage of women who remarry following divorce has been declining in recent decades, however (Brown & Lin, 2013; Schoen & Standish, 2001). Nevertheless, this decline might have been steeper if contact between nonresident fathers and children had not increased. In contrast to contact, receiving child support does not appear to affect the likelihood of maternal remarriage. If true, then social policies can continue to improve the child support enforcement system without the risk of undermining the economic benefits of maternal remarriage.

REFERENCES

- Allison, P. D. (Ed.). (1984). *Event history analysis: Regression for longitudinal event data* (No. 46). Sage.
- Amato, P. R., & Dorius, C. (2010). Fathers, children, and divorce. In M. Lamb (Ed.) *The role of the father in child development* (5th ed., pp. 177-200). Hillsdale, NJ: Erlbaum.
- Amato, P. R., & Gilbreth, J. G. (1999). Nonresident fathers and children's well-being: A meta-analysis. *Journal of Marriage and the Family*, 61, 557-573. DOI: 10.2307/353560
- Amato, P. R., Meyers, C. E., & Emery, R. E. (2009). Changes in nonresident father-child contact from 1976 to 2002. *Family Relations*, 58, 41-53. DOI: 10.1111/j.1741-3729.2008.00533.x
- Beller, A. H., & Graham, J. H. (1993). *Small change, the economics of child support*. New Haven, Conn.: Yale University Press.
- Binstock, G., & Thornton, A. (2003). Separations, reconciliations, and living apart in cohabiting and marital unions. *Journal of Marriage and Family*, 65, 432-443. DOI: 10.1111/j.1741-3737.2003.00432.x
- Bramlett, M. D., & Mosher, W. D. (2002). Cohabitation, marriage, divorce, and remarriage in the United States. *National Center for Health Statistics. Vital Health Stat*, 23(22), 1-32. Retrieved from http://www.cdc.gov/nchs/pressroom/02news/div_mar_cohab.htm
- Brown, S. L., & Lin, I-F. (2013). *Age variation in the remarriage rate, 1990-2011*. (FP-13-17). National Center for Family & Marriage Research. Retrieved from http://ncfmr.bgsu.edu/pdf/family_profiles/file134878.pdf
- Bumpass, L. L., Martin, T. C., & Sweet, J. A. (1991). The impact of family background and early marital factors on marital disruption. *Journal of Family Issues*, 12, 22-42. DOI: 10.1177/019251391012001003

- Cancian, M., & Meyer, D. R. (2007). The effect of child support on subsequent marriage and cohabitation. Presented at the annual meeting of the Population Association of America, New York, NY.
- Carlson, M. J. (2006). Family structure, father involvement, and adolescent behavioral outcomes. *Journal of Marriage and Family*, 68, 137-154. DOI: 10.1111/j.1741-3737.2006.00239.x
- Cheadle, J., Amato, P. R., & King, V. (2010). Patterns of nonresident father contact. *Demography*, 47, 205-225. DOI: 10.1353/dem.0.0084
- Cherlin, A. J. (1978). Remarriage as an incomplete institution. *American Journal of Sociology*, 84, 634-650. DOI: 10.1086/226830
- Cherlin, A. J. (2009). *The marriage-go-round: The state of marriage and the family in America today*. New York: Alfred A. Knopf.
- Cruz, J. (2012). Remarriage Rate in the U.S., 2010 (FP-12-14). Bowling Green, Ohio: National Center for Family & Marriage Research. Retrieved from http://ncfmr.bgsu.edu/pdf/family_profiles/file114853.pdf
- Emery, R. E. (2012). *Renegotiating family relationships: Divorce, child custody, and mediation*. New York: Guilford Press.
- Folk, K. F., Graham, J. W., & Beller, A. H. (1992). Child support and remarriage: Implications for the economic well-being of children. *Journal of Family Issues*, 13, 142-157. DOI: 10.1177/019251392013002002
- Furstenberg, F. F., & Cherlin, A. J. (1991). *Divided families: What happens to children when parents part*. Cambridge, MA: Harvard University Press.
- Furstenberg, F. F., Nord, C. W., Peterson, J. L., & Zill, N. (1983). The life course of children of divorce: Marital disruption and parental contact." *American Sociological Review*, 48, 656-668. DOI:10.2307/2094925

- Goldscheider, F., & Sassler, S. (2006). Children and stepfamily formation. *Journal of Marriage and Family*, 68, 275-291. DOI:10.1111/j.1741-3737.2006.00252.x
- Grall, T. S. (2011). Custodial mothers and fathers and their child support: 2009. *Current Population Reports P60-240*. Washington, DC: US Census Bureau.
- Graham, J. W., Olchowski, A. E., & Gilreath, T. D. (2007). How many imputations are really needed? Some practical clarifications of multiple imputation theory. *Prevention Science*, 8, 206-213. DOI: 10.1007/s11121-007-0070-9
- Homans, G. C. (1974). *Human behavior: Its elementary forms*. New York: Harcourt Brace
- Kantor, D., & Lehr, W. (1975). *Inside the family*. San Francisco: Jossey-Bass.
- King, V. (2009). Stepfamily formation: Implications for adolescent ties to mothers, nonresident fathers, and stepfathers. *Journal of Marriage and Family*, 71, 954-968. DOI: 10.1111/j.1741-3737.2009.00646.x
- Kreider, R. M., & Ellis, R. (2011). Number, timing, and duration of marriages and divorces: 2009. *Current Population Reports, P70-125*. Washington DC: U.S. Census Bureau.
- Lino, M. (2012). *Expenditures on Children by Families, 2012*. US Department of Agriculture, Nutrition Policy and Promotion, Miscellaneous Publication Number 1528-2012.
- Marsiglio, W. (2004). *Stepdads: Stories of love, hope, and repair*. Lanham, MD: Towman & Littlefield.
- McCarthy, J. (1978). A comparison of the probability of the dissolution of first and second marriages. *Demography*, 15, 345-359. DOI: 10.2307/2060655
- McGene, J., & King, V. (2012). Implications of new marriages and children for coparenting in nonresident father families. *Journal of family issues*, 33, 1619-1641. DOI: 10.1177/0192513X12437150

- McNamee, C. B., & Raley, R. K. (2011). A note on race, ethnicity and nativity differentials in remarriage in the United States. *Demographic Research*, 24, 293-312. DOI: 10.4054/DemRes.2011.24.13
- Meyer, D. (1999). Compliance with child support orders in paternity and custody cases. In R. A. Thompson & P. R. Amato (Eds.), *The postdivorce family: Children, parenting, and child development* (pp. 127-157). Thousand Oaks, CA: Sage. DOI: 10.4135/9781452234038.n6
- Minuchin, S. (1974). *Families and family therapy*. Harvard University Press.
- Morgan, L.A. (1988). Outcomes of marital separation: A longitudinal test of predictors. *Journal of Marriage and the Family*, 50, 493- 498. DOI: 10.2307/352014
- Morrison, D. R., & Ritualo, A. (2000). Routes to children's economic recovery after divorce: Are cohabitation and remarriage equivalent? *American Sociological Review*, 65, 560-580. DOI: 10.2307/2657383
- Sabatelli, R. M., & Shehan, C. L. (1993). Exchange and resource theories. In P. G. Boss, W. J. Doherty, R. LaRossa, W. R. Schumm, & S. K. Steinmetz (Eds). *Sourcebook of family theories and methods: A contextual approach* (pp. 385-411). New York: Springer.
- Schoen, R., & Standish, N. (2001). The retrenchment of marriage: Results from marital status life tables for the United States, 1995. *Population and Development Review*, 27, 553-563. DOI: 10.1111/j.1728-4457.2001.00553.x
- Seltzer, J. A., & Bianchi, S. M. (1988). Children's contact with absent fathers. *Journal of Marriage and the Family*, 50, 663-677. DOI: 10.2307/352636
- Shafer, K. & James, S. L. (2013). Gender and socioeconomic status differences in first and second marriage formation. *Journal of Marriage and Family*, 75, 544-564.

- Smock, P. J., Manning, W. D., & Gupta, S. (1999). The effect of marriage and divorce on women's economic well-being. *American Sociological Review*, 64, 794- 812. DOI: 10.2307/2657403
- Sobolewski, J. M., & King, V. (2005). The importance of the coparental relationship for nonresident fathers' ties to children. *Journal of Marriage and Family*, 67, 1196-1212. DOI: 10.1111/j.1741-3737.2005.00210.x
- South, S. J., & Lloyd, K. M. (1995). Spousal alternatives and marital dissolution. *American Sociological Review*, 60, 21-35. DOI: 10.2307/2096343
- Stewart, S. D. (2003). Nonresident parenting and adolescent adjustment: The quality of nonresident father-child Interaction. *Journal of Family Issues*, 24, 217-244. DOI: 10.1177/0192513X02250096
- Stewart, S. D. (2010). Children with nonresident parents: Living arrangements, contact, and child support. *Journal of Marriage and Family*, 72, 1078-1091. DOI: 10.1111/j.1741-3737.2010.00751.x
- Tach, L., Mincy, R., & Edin, K. (2010). Parenting as a "package deal": Relationships, fertility, and nonresident father involvement among unmarried parents. *Demography*, 47, 181-204. DOI: 10.1353/dem.0.0096
- Thibaut, J., & Kelley, H. (1959). *The social psychology of groups*. New York: Wiley.
- Yun, K. R. (1992). Effects of child support on remarriage of single mothers. In I. Garfinkel, S. S. McLanahan, & P. K. Robins (Eds.), *Child support assurance: Design issues, expected impacts, and political barriers as seen from Wisconsin* (pp. 315-38). Washington, D.C.: The Urban Institute Press.

Table 1. Descriptive statistics for all variables

Variable	Time 1 case file		Person-year file	
	Mean	(SD)	Mean	(SD)
Remarried	0.02	-----	0.06	-----
Contact frequency	3.33	(1.66)	2.84	(1.71)
Child support	0.27	-----	0.54	-----
Duration	0.00	-----	4.74	(4.00)
Age mother	30.43	(6.97)	34.52	(7.09)
South	0.37	-----	0.36	-----
Premarital birth	0.21	-----	0.22	-----
Not a high school graduate	0.18	-----	0.18	-----
High school graduate	0.47	-----	0.47	-----
Postsecondary education	0.35	-----	0.35	-----
Non-Hispanic white	0.53	-----	0.49	-----
Non-Hispanic Black	0.22	-----	0.27	-----
Hispanic	0.18	-----	0.19	-----
Other non-Hispanic race	0.07	-----	0.05	-----
Not employed	0.28	-----	0.24	-----
Part-time employment	0.13	-----	0.12	-----
Full-time employment	0.59	-----	0.64	-----
All girls	0.32	-----	0.36	-----
All boys	0.31	-----	0.33	-----
Boys and girls	0.37	-----	0.31	-----
Total children	2.01	(1.02)	2.04	(1.07)
Distance from father	2.54	(0.90)	2.78	(0.95)
Some children live with father	0.03	-----	0.03	-----
<i>N</i>	876	-----	6,420	-----

Note: N refers to the maximum number of cases in Time 1. This number varies across variables due to missing data. Time 1 variables were drawn from the first year in which cases entered the analysis. Person-year means exclude years in which all children lived with fathers. Standard deviations are not shown for binary variables.

Table 2. Logistic regression of maternal remarriage on father involvement variables and covariates

Variable	Model 1			Model 2		
	<i>b</i>	(<i>SE</i>)	Odds	<i>b</i>	(<i>SE</i>)	Odds
Contact frequency	-----	-----	-----	0.12*	(0.05)	1.13
Child support	-----	-----	-----	-0.01	(0.16)	0.99
Years since separation	0.27***	(0.05)	1.31	0.29***	(0.05)	1.34
Years squared	-0.02***	(0.004)	0.98	-0.02***	(0.004)	0.98
Age mother	-0.07***	(0.01)	0.93	-0.08***	(0.01)	0.92
South	0.45***	(0.12)	1.57	0.46***	(0.12)	1.58
Premarital birth	-0.26	(0.17)	0.77	-0.27	(0.17)	0.76
Not high school graduate	-----	-----	-----	-----	-----	-----
High school graduate	0.25	(0.17)	1.28	0.24	(0.17)	1.27
Postsecondary education	0.37	(0.19)	1.44	0.35	(0.20)	1.42
Non-Hispanic white	-----	-----	-----	-----	-----	-----
Non-Hispanic black	-1.09***	(0.18)	0.34	-1.07***	(0.18)	0.34
Hispanic	-0.15	(0.15)	0.86	-0.13	(0.15)	0.88
Other non-Hispanic race	-0.34	(0.24)	0.71	-0.34	(0.24)	0.71
Not employed	-----	-----	-----	-----	-----	-----
Part-time employment	0.19	(0.21)	1.21	0.17	(0.21)	1.18
Full-time employment	0.34*	(0.15)	1.40	0.31*	(0.15)	1.36
All girls	-----	-----	-----	-----	-----	-----
All boys	0.02	(0.15)	1.02	0.01	(0.15)	1.01
Boys and girls	0.19	(0.18)	1.21	0.18	(0.18)	1.20
Total children	-0.04	(0.08)	0.96	-0.04	(0.08)	0.96
Distance from father	0.08	(0.08)	1.08	0.20	(0.11)	1.22
Some children live father	0.61	(0.34)	1.84	0.59	(0.34)	1.80
Constant	-1.61***	(0.43)	-----	-2.10***	(0.62)	-----
<i>N</i> cases	882			882		
<i>N</i> person years	6,420			6,420		

Note: Table values are logistic regression coefficients, standard errors (in parentheses), and odds ratios. Models are based on multiple imputation with 40 data sets. Significance tests are two-tailed. * $p < .05$. ** $p < .01$. *** $p < .001$.

Table 3. Predicted annual probability of maternal remarriage by frequency of nonresident father contact with children

Contact	Label	Probability
0	Never	0.028
1	Once in the past 12 months	0.032
2	2-11 times in the past 12 months	0.036
3	1-3 times in the past month	0.040
4	About once a week	0.045
5	2-5 times a week	0.050
6	Almost every day	0.057

Note: Probabilities are based on a logistic regression equation with all covariates set at their means.