



Published in final edited form as:

Soc Sci Res. 2008 December ; 37(4): 1188–1199.

The Risk of Divorce as a Barrier to Marriage among Parents of Young Children

Maureen R. Waller* and
Cornell University

H. Elizabeth Peters
Cornell University

Abstract

Using data from the Fragile Families Study, we examine how unmarried parents' risk of divorce influences their decision to marry. Regression results show that unmarried parents with a high predicted probability of marital dissolution (based on estimates of marital dissolution for a sample of initially married mothers with similar characteristics) had significantly lower odds of marriage to the father of their child even after controlling for individual and relationship characteristics expected to influence marriage transitions. The dissolution propensity we examine also includes a measure of the local divorce climate. As such, our results provide support for the argument that high rates of divorce in the population have led to a fear of divorce among unmarried parents which reduces their probability of marriage.

Introduction

Over the past four decades, the marital behavior of Americans has changed in significant ways. A steep increase in divorce occurred in the 1960's and 1970's, followed by a period of leveling off and slight decline by the late 1980's (Ellwood and Jencks, 2004). During the same period, the median age at first marriage increased substantially. Between 1965 and 1998 the proportion of unmarried women in their early twenties more than doubled, and the proportion of unmarried women in their late twenties more than tripled (Ventura and Bachrach, 2000). The delay in marriage also contributed to the rising rates of nonmarital childbearing by increasing the period of risk. By 1999, about one third of all births were to unmarried women. These changes in marital behavior are particularly consequential for children, and studies have estimated that half of all children born in the U.S. will spend some time living in households headed by a single parent (Castro-Martin and Bumpass, 1989; Ellwood and Jencks, 2004).

A number of hypotheses have been put forward to explain why more men and women are postponing marriage, including increased earnings of women and poor marriage markets (Ellwood and Jencks, 2004). In this paper we examine an additional explanation for marital delays: the fear of divorce which reduces confidence in the institution of marriage. Although this explanation has been mentioned by scholars and pundits, alike (e.g., Wilson, 1996;

© 2008 Elsevier Inc. All rights reserved.

*Please direct all correspondence to Maureen Waller, Department of Policy Analysis and Management, 257 MVR Hall, Cornell University, Ithaca, NY 14853, 607-254-4844 (phone); mrw37@cornell.edu.

Publisher's Disclaimer: This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final citable form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Whitehead and Popenoe, 2002; Gibson-Davis, Edin, and McLanahan, 2005), few studies have attempted to estimate its importance empirically.

We use data from the Fragile Families and Child Wellbeing Study to address this issue directly. We first create a dissolution propensity index derived as a function of individual, partner, and relationship characteristics and contextual variables, using estimated parameters from a regression of the probability of marital dissolution in the sample of initially married mothers in the study. We then calculate the dissolution propensity for parents who were unmarried at the time of their child's birth and examine the association between the dissolution propensity and these parents' transition to marriage within three years. Some studies have shown that women are less likely to marry a partner who has undesirable characteristics or when the relationship is of lower quality (e.g., Brown, 2000; Carlson, McLanahan, and England, 2004). However, our analysis goes further by showing that unmarried mothers with a higher dissolution propensity are less likely to marry their child's father, even after controlling for partner and relationship characteristics. One of the variables that enters into our dissolution propensity index is the percentage of women who are divorced in the respondent's city of residence. Higher exposure to divorce may create a more generalized fear of divorce that is independent of the current relationship characteristics. In other words, a fear of divorce may increase the threshold that defines who is an acceptable marriage partner and may reduce the likelihood of marrying someone with a given set of characteristics.

The Fragile Families Study is particularly well suited to our analysis, because it is the only large scale data set that has detailed measures of current partner and relationship characteristics for both married and unmarried women. The married sample is necessary to estimate the parameters of the dissolution propensity index that we then calculate for the unmarried sample, and the relationship characteristics are essential to be able to control for factors that are confounded with the dissolution propensity. Unmarried parents have also been the focus of considerable academic and policy attention, including efforts to promote marriage, because of their disproportionate risk of poverty and participation in public assistance programs. Our results contribute to this policy debate by documenting an additional reason why these mothers may be reluctant to marry the father of their child.

The discussion begins by reviewing previous research on determinants of divorce and marriage. We then examine the association between unmarried parents' predicted risk of marital dissolution and their transition to marriage during the first three years of their child's life.

Marriage Decisions and the Risk of Divorce

Although divorce is no longer on the rise, the United States continues to have one of the highest rates of marital dissolution among Western, industrialized countries, with as many as half of all marriages established in the 1980's projected to end in divorce (Raley and Bumpass, 2003; Schoen and Standish, 2001). The likelihood of growing up in a family that experienced divorce and of interacting with divorced adults and children of divorce has also increased for recent cohorts as marital dissolution has become more common. At the same time, delays in marriage have led to a decrease in the ratio of married people relative to divorced people (McLanahan and Casper, 1995). As a result, young men and women now observe a larger number of divorces relative to stable marriages than in the past. The exposure to divorce also varies by socioeconomic status, given large race disparities in marital dissolution and recent increases in educational differences in divorce (Raley and Bumpass, 2003).

Recent demographic forecasts suggest that about 90% of U.S. women will eventually marry but are waiting longer to do so than in previous years (Goldstein and Kenney, 2001). However, women who have had a nonmarital birth and African-American women are less likely have married by age 40 than other women (Ellwood and Jencks, 2004; Lichter and Graefe, 2001).

¹ The literature that attempts to explain declining marriage rates generally focuses on two main factors. First, the increasing labor market attachment and earnings of women lead to an independence effect that allows women to remain unmarried. Second, the literature suggests that poor marriage markets (characterized by a shortage of marriageable men) will reduce marriage rates for women. The latter hypothesis is particularly salient for explaining the low marriage rates among poor African-American women living in inner city areas following recent declines employment and increases in incarceration among men in their marriage market (Mincy, 2006).

In this paper we argue that an additional factor that may lead young adults to delay or avoid marriage is a reduced confidence in marriage (or fear of divorce) which may result from being exposed to high levels of marital dissolution. We assume that individuals observe others' experiences of divorce and use that information to predict their own likelihood of divorce. In particular, we suggest that they are likely to assess their own risk of divorce by considering factors that lead to marital dissolution among people they encounter or who have similar attributes. This is a form of rational expectations that is commonly used in the economics literature (Sargent, 2002). In addition, previous sociological and anthropological scholarship on risk reminds us that individuals' perceptions of risk are socially constructed and reflect the concerns of the cultures in which they live (Douglas and Wildalvsky, 1982; Clarke and Short, 1993).

Why do we expect the risk of divorce to matter for unmarried parents' decisions about marriage independent of their personal characteristics, the quality of their relationship itself, and the risk of breakup that entails? We suggest that the emotional and financial costs of divorce are higher than the costs of breakup from a nonmarital relationship, whether cohabiting or not. For example, a divorce may be more disruptive for families and lead to greater social stigma than dissolving a nonmarital relationship. Couples may also incur legal expenses and hassles as part of the divorce process. One study (Lichter, Graefe, and Brown, 2003) finds that disadvantaged women who marry and subsequently divorce have higher poverty rates than their counterparts who never marry, suggesting that the economic cost of divorce may be high for these women. Thus, if parents of young children believe that there is a high probability of divorce, they may be hesitant to convert their current relationship into a marriage. An alternative view is that higher exposure to divorce could reduce rather than increase the fear of divorce by normalizing this experience.

Our expectation that unmarried parents' fear of divorce will diminish their willingness to marry their child's other parent is informed by qualitative evidence. In two studies of unmarried mothers and fathers (author citation), parents often explained their decision to delay marriage in regard to the high risk of divorce and the potential consequences of divorce to themselves and their children. Parents suggested that their high exposure to divorce had eroded their own confidence in having a successful marriage, and they referred to personal anecdotes, as well as publicly available information, to highlight particular costs of divorce they hoped to avoid.

Although parents regarded a stable marriage as an ideal environment in which to raise children, they often thought that their children would be worse off if they married their partner and subsequently divorced than if they remained unmarried. Of particular concern were the lasting emotional and psychological harm children could suffer as a result of divorce, which some had experienced first-hand when their own parents' marriages ended. Parents also felt divorce could have emotional and moral consequences for them, given the symbolic significance they attached to marriage. Because parents said they felt marriage should be permanent and "last

¹Data from the 1995 NSFG show that 27.1% of Black women between the ages of 35 to 44 have never married compared to 8.5% of White women (Graefe and Lichter, 2007).

forever,” divorce was regarded as a personal failure and a violation of a serious religious commitment.² Finally, parents seemed to want to avoid the legal conflicts and entanglements associated with divorce, which they viewed as both personally difficult and detrimental to children. They typically preferred to make informal rather than legal parenting and child support agreements when their relationships ended and had a higher likelihood of doing so if they did not legally marry. Because they viewed divorce as emotionally, morally, and economically costly, parents were hesitant to marry, particularly if they saw the “warning signs” of divorce in their own relationships.

Because the question we address links marriage decisions with expectations about divorce, we briefly review the existing evidence about factors related to both of these outcomes. Although both individual characteristics and relationship quality are likely to affect unmarried couples’ relationship transitions, we expect their predicted risk of divorce to have an independent influence on their decision to marry.

Factors Related to Relationship Transitions

Previous research and theory indicate that the transition to marriage is inversely related to several of the same factors that predict marital dissolution. For example, Becker (1991) argues that divorce may occur when new information or changed circumstances over time cause a substantial reduction in a married couple’s assessment of the gains to marriage. The greater the expected gains are at the beginning of the relationship, the more likely the couple is to marry, and the less likely it is that changes in circumstances will cause a large enough reduction in marriage gains to lead to divorce.

Previous studies consistently show a strong, inverse relationship between male earnings and marital dissolution (Becker, Landes, and Michael, 1977; Hoffman and Duncan, 1995; Ruggles, 1997). Men’s earnings are also positively related to marriage (Oppenheimer, Kalmijn, and Lim, 1997; Sweeney, 2002), the transition from cohabitation to marriage (Sanchez, Manning, and Smock, 1998; Smock and Manning, 1997), and marriage following a nonmarital birth (Carlson, McLanahan, and England, 2004). Men’s employment instability may also increase couples’ uncertainty about marriage, leading them to delay marriage and to enter cohabiting rather than marital unions (Clarkberg, 1999; Oppenheimer, Kalmijn, and Lim, 1997; Oppenheimer 2003). The evidence for women’s earnings is mixed (Oppenheimer, 1997). However, an increasing number of studies suggest that women’s earnings have a positive influence on marriage (White and Rogers, 2000). There is some evidence that women’s economic characteristics may be more important for recent cohorts entering marriage (Sweeney and Cancian, 2004; Sweeney, 2002).

Other personal characteristics that have been found to affect marriage and its dissolution include family structure when growing up, age, and cultural factors. A large body of research indicates that adults who experienced a parental divorce in childhood are themselves more likely to divorce (e.g., McLanahan and Bumpass, 1988; Bumpass, Castro-Martin, and Sweet, 1991; Amato, 1996), and to cohabit rather than marry in their first union (Thornton, 1991). Many studies have also found that divorce is more likely when couples marry young (Bumpass and Sweet, 1972; Becker, Landes, and Michael, 1977; Morgan and Rindfuss, 1985; South 1995; Teachman, 2002). Both divorce and delays in marriage have been associated with individual risk factors like substance use and incarceration (Amato and Rogers, 1997; Lopoo and Western, 2005). Research further points to cultural factors, such as religious participation, that may dissuade couples from divorcing (Thomas and Cornwall, 1990; Amato and Rogers, 1997) and encourage marriage (Wilcox and Wolfinger, 2007).

²See also Edin and Kefalas, 2005.

The characteristics of couples' relationships may also influence the likelihood of marital dissolution and marriage. For example, previous research has found that a destructive conflict style among spouses predicts early marital instability (Hatchett, Veroff, and Douvan, 1995), while positive characteristics of couples' relationships such as social network integration, may help stabilize relationships (Booth, Edwards, and Johnson, 1991). Unmarried parents with higher quality relationships are also more likely to make the transition to marriage (Carlson, McLanahan, and England, 2004; Osborne, 2005), whereas marriage is considerably less likely among women who have experienced abuse as adults (Cherlin et al., 2004).

Other Factors Related to Divorce

Previous research also points to factors related to divorce but not directly to the quality of a specific relationship. It is these factors that will help us identify the separate effect of the dissolution propensity from that of the personal and relationship characteristics that directly affect marriage propensities. For example, the state's divorce rate is highly predictive of whether or not a couple will divorce and gives us some indication of the cultural tolerance for divorce or other unobserved state specific characteristics that may be associated with divorce (author citation). Research shows that some laws that liberalized divorce procedures are associated with higher rates of divorce, but the evidence about the effect of no-fault divorce laws is inconclusive (Stetson and Wright, 1975; author citation; Friedberg, 1998; Gruber, 2000; Wolfers, 2003). Although little research has examined the association between custody arrangements and the likelihood of divorce, we would expect laws favoring joint custody to increase the perceived cost of union dissolution for married mothers because these arrangements could reduce their authority over, and time spent with, their child following a divorce. Most states now allow joint custody, but eleven states with a statutory preference for joint custody will grant joint custody to parents unless there is proof that this would not be in the best interest of the child (Atkinson, 1996, Katz, 2003; American Bar Association, <http://www.abanet.org/media/factbooks/cht4.html>).

Data Description

The analysis draws on data from the Fragile Families Study, which follows a new birth cohort of children in 20 U.S. cities. The total sample in the Fragile Families Study includes 4,898 births, 3,712 of which occurred to unmarried parents and 1,186 to married parents. The weighted data are representative of nonmarital births to parents residing in cities with populations over 200,000 (see Reichman, Teitler, Garfinkel, and McLanahan, 2001). Although our primary interest is in understanding whether expectations about marital dissolution lead unmarried mothers to delay or avoid marriage, we also use data from mothers who were married at the child's birth to estimate the marital dissolution regression used to create the dissolution propensity index. Because births to marital parents were selected from the same cities and hospital as unmarried parents, the married sample can be used as a comparison group.

New mothers were initially interviewed in person at the hospital, and the fathers of their children were interviewed either at the hospital or someplace else as soon as possible after the birth. The response rate at baseline was about 87% for unmarried mothers and 82% for married mothers; response rates were about 76% for unmarried fathers and 88% for married fathers. Mothers and fathers were also interviewed when their child was about 12–18 months and 36 months. By 36 months, 88% of unmarried mothers and 89% of married mothers in the baseline survey continued to participate in the study as did 68% of unmarried fathers and 82% of married fathers whose partners were in the baseline survey. Non-response and attrition among mothers has been low, but non-response rates among fathers are higher, and the fathers that remain in the study are more likely to be selective of those who have a romantic relationship with the mother. Because mothers are asked questions about the fathers of their children, however, the survey has information about fathers who were never interviewed or who dropped out of the

study. Using these data mitigates the possible bias from using fathers' reports from a selective sample.³ Of the total number of 4,898 cases, we dropped 669 cases in which the mother did not report data at Year Three. Of the remaining cases, we excluded 31 cases in which the father was deceased by Year Three and 16 cases in which the mother did not report her relationship status with the father. Our sample in this paper includes 4,182 cases in which mothers participated in the survey at baseline and Year Three, had data for the dependent variables used in our analysis, and in which the father was still living. This represents about 85% of the baseline sample of cases in these cities.⁴

We describe our analytical strategy in the next section. Here we provide descriptive information about the individual, partner, and relationship characteristics and the divorce climate variables that we use in our estimation. Table 1 presents the means for the samples of parents in the survey who had marital (column 1) and nonmarital (column 2) births. Although the two samples were drawn from births that occurred in the same hospitals, t-tests show that there are statistically significant and substantively large differences in many of their socio-economic characteristics. We discuss the implications of these differences for our analyses in a later section.

Dependent Variables

For both measures of marital transitions, we use women's reports of their relationship status, because the sample of mothers is more complete than that of fathers. To estimate the parameters used to create the dissolution propensity index, we use the marital birth sample, and we measure the probability of marital dissolution within three years of the birth. The data do not allow us to distinguish divorce from separation for this sample. To simplify the exposition in subsequent discussion, we will refer to both states as marital dissolution. Column 1 of Table 1 shows that about 11% of that sample had experienced a dissolution of their relationship. Because the average couple married about 4 to 5 years before the baseline survey, they would have been married 7 to 8 years by Year Three. Previous research suggests that more than one-half of the marriages to women with young children that will ever dissolve are likely to dissolve by this time (see Bramlett and Mosher, 2002, Table 21).

We use the unmarried sample for the primary analysis in this paper that looks at the probability of marrying within three years of the child's birth. Column 2 of Table 1 shows that about 14% of unmarried parents had married by Year Three. Of those parents who were unmarried at the time of the birth, the majority of parents were living together (49%) or romantically involved, but living separately (35%). Only 16% of unmarried mothers had no romantic relationship with the child's father at the time of the child's birth.

Parents' Personal Characteristics at the Time of Their Child's Birth

Table 1 shows that mothers with a marital birth were about 5 years older than those who had a nonmarital birth (29 vs. 24). Note that age at the birth of the child is positively correlated with age at marriage for the married sample, but it is not a perfect proxy, because mothers who delay their births or those with higher parity births will also be older. Although age at marriage may be a better measure of the theoretical construct for predicting marital dissolution, we need

³Based on an extensive review of research on father involvement, Pleck and Masciadrelli (2004) suggest that selection bias due to non-response of fathers in many surveys may be a greater threat to validity than mothers' reporting bias.

⁴Rather than limiting the analysis to couples who were romantically involved at the birth, we use the full sample because our research question examines the factors affecting whether an unmarried mother will marry the father of her child, independent of the relationship status at birth. Twelve percent of uninvolved parents in this study reunite by 36 months. Although only 2% of these couples marry within three years, others continue to be at risk for marriage. As a robustness check, we restricted the sample used in the logistic regressions to parents who were in romantic relationships at the time of their child's birth. The regression results were very similar qualitatively and in regard to statistical significance as in the full sample (results available upon request).

to include similar measures for married and unmarried parents in our models to create a dissolution propensity (as discussed in the next section). We also include a dummy variable measuring whether the mother lived with both biological parents at age 15 as a proxy for whether their parents divorced -- about 66% of married mothers compared to only 35% of unmarried mothers.

African-Americans are over-represented among families with nonmarital births (Ventura and Bachrach, 2000) and have higher rates of divorce (Cherlin, 1992; Ellwood and Jencks, 2004), despite some recent convergence in the likelihood of divorce among African-Americans and whites (Teachman, 2002). Our analysis treats parents' race and ethnicity both as a demographic characteristic and as a measure of homogamy. We include separate indicators for couples in which both partners are Black, non-Hispanic (the reference category), both are White, non-Hispanic, both are Hispanic, and couples of mixed or other race/ethnic groups. We use parents' own reports of their race or ethnic status, and use mothers' reports of fathers' race/ethnicity for those men who did not participate in the survey. About one-fifth of married (20%) and unmarried parents (23%) were both Hispanic, and similar proportions were from different race or ethnic groups (19% vs. 17%). However, married parents in the study were more likely to be White (39% vs. 9%) and less likely to be Black (22% vs. 51%) than unmarried parents.

We examine men's employment with a variable indicating whether the father was employed in the week before the baseline interview, according to mothers' reports. We also include a dummy variable when information about fathers' employment was not available. The majority of fathers in both groups were employed, but employment rates were higher among fathers who were married at the birth of their child (91%) compared to those who were unmarried (68%). We measured father's hourly wage at baseline for those fathers who reported this. For fathers who reported weekly, biweekly, monthly, or annual earnings, an hourly wage was calculated by dividing fathers' reports of average hours worked per week by the average number of weeks worked per year. We predicted an hourly wage for fathers who did not report earnings based on their race, age (and age squared), educational characteristics, the metropolitan median service sector wage rate, and local unemployment rate. Married fathers had a higher wage at about \$16.90 per hour compared to unmarried fathers at about \$9.40 per hour.

Because mothers were not asked whether they were working in the week prior to the birth, the variable measuring women's participation in the work force is based on whether or not they had earnings in the last year. We see that about 73% of married mothers and 68% of unmarried mothers were employed sometime during the 12 months preceding childbirth. A dummy variable is used to compare mothers who have attended college to those who report receiving a high school degree or less education (the reference category). On average, married mothers have higher levels of education than do unmarried parents, with 61% of married mothers reporting at least some college education compared to 24% of unmarried mothers.

We also include dichotomous measures of other individual characteristics which previous studies suggest may lead to a spurious relationship between the dissolution propensity and marital transitions if not held constant. About 52% of married mothers and 34% of unmarried mothers attended church at least several times each month, a characteristic which may be positively related to marriage and union stability. Previous research also points to multi-partner fertility and other risk factors which may work in the opposite direction (author citation; Carlson, McLanahan, and England, 2004). We see that similar shares of mothers and fathers had children with other partners as reported by mothers at the 12–18 follow-up, with unmarried parents about 2 ½ times more likely to report multi-partner fertility than married parents. At the first follow-up survey, mothers reported that about 9% of married fathers and 35% of unmarried fathers had spent time in a correctional facility. A small proportion of mothers (2–

3%) and fathers (3–6%) had substance use problems that interfered in their daily lives, as reported by mothers at baseline.

Parents' Relationship Characteristics at the Time of Their Child's Birth

Conflict in the relationship is captured by an index that sums mothers' responses to six questions asking how often she and the father argue about money, spending time together, sex, the pregnancy, drinking or drug use, and being faithful (mothers could respond never, sometimes, and often). Scores on this index range from 6, for mothers who report never arguing with the father about these issues, to 18, for mothers who report arguing often about each issue. A dummy variable is also included to indicate missing information about conflict. Cronbach's alpha for this index is .65, and factor analysis suggests there is one factor underlying the index.

We measure physical abuse with a variable from the one year follow-up interview that asks mothers whether they had been cut, bruised, or seriously hurt in a fight with the father and a variable from baseline that asks whether the father has hit or slapped them in an argument. Although the follow-up question is a more direct indicator of physical abuse, 17% of mothers had missing data on this variable. Therefore, we use both measures and create a dummy variable to indicate if mothers' responses were missing on both of these questions. Mothers are considered to have experienced abuse if they report violence at either wave. Unmarried mothers report only slightly higher levels of conflict with their child's father, but the reported incidence of abuse is higher for unmarried mothers (11%) than married mothers (4%). We also include a question asking mothers whether couples visited together with friends in the last month to indicate positive social interactions and shared social networks. More married mothers reported visiting friends together (86%) than did unmarried mothers (68%).

Divorce Laws and Climate

To capture the climate of divorce in the parents' place of residence, we calculate the percent of females 18–44 who are divorced in each city (U.S. Census Bureau, 2000). On average, 9% of women 18–44 were divorced in the 20 cities included in the Fragile Families data, with the percent divorced in these cities ranging from 6% to 13%. We also include a measure of whether parents reside in a state with no fault divorce procedures that allow either party to initiate divorce unilaterally (vs. requiring mutual consent) using the classification documented in Gruber (2000)⁵ and a dummy variable measuring whether parents live in a state with a presumption of joint custody (about 18% of the married sample).

Analytical Strategy and Results

We model marriage as a function of: (a) the individual characteristics of both partners, X_i and X_j that capture constructs such as the desirability of each individual, the opportunity costs of marriage, and the propensity to marry; (b) relationship characteristics, X_R , that capture the quality of the relationship; and (c) the fear of divorce, F :

$$M=m(X_i, X_j, X_R, F) \quad (1a)$$

We do not directly observe F for any couple, but we suggest that higher rates of divorce in the population increase parents' fear that they may have to bear that cost, and we use as a proxy

⁵All states in the U.S. currently have some form of no-fault divorce, but these divorce laws vary widely across states. The distinction that is commonly used in the literature that examines the relationship between divorce laws and divorce rates is whether a state has adopted unilateral divorce laws, where one spouse can obtain a divorce without the consent of the other or whether a state requires "mutual consent." About half the states can be classified as having unilateral divorce laws and the other half have mutual consent (Gruber, 2000).

for F, the divorce propensity, D, which is a function of individual and relationship characteristics, X_i , X_j and X_R , and contextual measures of the legal and social climate relating to divorce in the mother's place of residence, X_C . We estimate D using a logit regression:

$$(Aux) D = \Pr(Div) = 1 / (1 + \exp(-(\alpha_0 + \alpha_1 X_i + \alpha_2 X_j + \alpha_3 X_R + \alpha_4 X_C)))$$

Our analytical strategy follows a two stage procedure to examine how unmarried parents' risk of marital dissolution is related to the transition to marriage. We can only observe a marital dissolution for women who marry, but we assume that unmarried women assess the likelihood of their own divorce by observing the experiences of married women with similar characteristics. Thus, we begin by estimating the auxiliary equation (Aux) using a logistic regression to examine how individual and relationship characteristics are related to marital dissolution in the sample of parents who were married at the time of their child's birth. We also include state divorce laws and the percentage of women divorced in each city to capture contextual factors that might be expected to affect an individual's probability of marital dissolution, independent of individual and relationship characteristics. In the next stage of the analysis, we use the estimated parameters from the auxiliary equation to calculate a dissolution propensity index, D^{\wedge} , for parents who were not married at the time of the birth. We then estimate the probability of marriage (equation 1b) and use the dissolution propensity index as a proxy for F, the fear of divorce:

$$\Pr(Mar) = 1 / (1 + \exp(-(\beta_0 + \beta_1 X_i + \beta_2 X_j + \beta_3 X_R + \beta_4 D^{\wedge}))) \quad (1b)$$

Results from the first stage auxiliary equation are presented in Appendix, Table A1. Because this first stage is used solely for the purpose of developing a dissolution propensity measure, it is important to maximize the predictive power of the measure and include all variables that theory suggests might directly affect this propensity. Problems of collinearity may result in some variables not being individually statistically significant at conventional levels.

We briefly discuss some of the results from this first stage. We find that individual characteristics of both partners significantly affect the probability of marital dissolution. In particular, the odds of couples dissolving their marriage within three years of their child's birth are significantly lower for mothers who are older and have more education, and the odds are higher when the father has been incarcerated. However, neither mothers' employment in the year preceding the birth nor fathers' employment at the time of birth were significantly related to marital dissolution. This is perhaps not surprising for the sample of married fathers, because less than 10% of these men were unemployed. For mothers, education is probably a better indicator of their employment potential than employment in the last year, since this time period coincided with their pregnancy.

The characteristics of parents' relationships also matter for marital dissolution. We find that couples' likelihood of dissolving their marriage increases with greater levels of conflict reported. Conversely, couples who report having visited with friends together in the last month, a positive indicator of relationship quality, are less likely to dissolve their relationships than other couples. Finally, measures intended to capture the policy and cultural climate of the respondent's place of residence were expected to affect dissolution propensities. We find that the odds of marital dissolution are significantly higher for couples who live in cities where divorce is more common, but we do not find evidence that state joint custody and no-fault divorce laws are strongly correlated with marital dissolution.⁶

In the second stage of the analysis, we use the estimated parameters from the first stage to predict a dissolution propensity for parents who were not married at the time of the birth. Specifically, to calculate unmarried couples' probability of marital dissolution, we took the α 's from the logistic model predicting marital dissolution among married parents and multiplied them by the X variables (where X is the vector of X_i , X_j , X_R , and X_C) that represent characteristics of individuals in the unmarried sample ($X\alpha$). We then used the logistic probability formula to calculate the dissolution propensity: $P = 1/(1+e^{-X\alpha})$. This procedure is similar to switching regression models in the econometrics literature (Maddala, 1983). The predicted dissolution propensity variable for the never married sample has a mean value of .326, and ranges between .002 and .98 (see Table 1).

We noted earlier that the mean characteristics of the sample of parents who were married and those who were not married at their child's birth differ. However, the predicted propensities will be unbiased as long as the dissolution propensity regression is correctly specified. Possible misspecification includes both omitted variables that are not available in the data and non-linearities or interactions among variables that are included in the regression. Our analysis reduces the problem of omitted variable bias by including a rich variety of measures of relationship quality and individual risk factors available in the Fragile Families data. Later we describe sensitivity analyses that address other sources of possible misspecification, including analyses that use comparison groups that are more closely matched on observables. It is also important to note that the Fragile Families data were collected in such a way that the initially married sample might be used as a comparison group for some types of analyses. In particular, the sample of married mothers is drawn from the same cities and the same hospitals in the exact same time period as the unmarried mothers. Some unobservables may be related to an individual's location and to the social, economic, and other support institutions that are common to a given location. Although it is not a panacea, the sampling strategy used by the Fragile Families Study minimizes the impact of unobservables that are due to location specific variables, and in some literature (e.g., the evaluation of job training programs), controlling for location has been found to be critical.

Table 2 presents our main results from logistic regression models that estimate the impact of the predicted risk of marital dissolution and other variables on the probability that unmarried parents will marry within three years of their child's birth. Our theoretical framework suggests that individual and relationship characteristics have both a direct impact on the likelihood of marriage (women are less likely to want to be involved with someone with undesirable characteristics) and an indirect effect (through their effect on the dissolution propensity). To explore whether the dissolution propensity has an impact independent of the individual characteristics of both partners and of the relationship, we first include the dissolution propensity in Model 1 by itself. Model 2 includes parents' relationship status at the time of the birth, which other research has found to be an important predictor of whether the mother marries the father. Because we expect the relationship status at birth to be correlated with dissolution propensities and with personal, partner, and relationship characteristics, Models 3–5 include initial relationship status as a control. Model 4 includes demographic and socioeconomic characteristics which are often examined in research on marital transitions, and Model 5 includes a broader set of individual and relationship characteristics which are available in the Fragile Families data. By adding an increasingly richer set of individual and relationship

⁶We also evaluated the robustness of our results when using a probit rather than a logit model in the first stage. Both the first stage results and the second stage results that included a dissolution propensity calculated from the probit were unaffected by this specification. Another option would have been to use an event history analysis to model marital dissolution. However, if an unmarried mother is trying to evaluate whether a marriage to her current partner might end in divorce, we believe that a cumulative probability is a more reasonable proxy for that thought process than a hazard (since she is not even married). Therefore, a discrete choice model is more appropriate for this analysis.

characteristics to the models, we can see whether these characteristics mediate the dissolution propensity.

Note that Models 4 and 5 also include some of the same measures of unmarried parents' individual and relationship characteristics as were included in the first stage to predict marital dissolution, because they are also expected to directly affect individuals' willingness to marry, as well as indirectly influencing that willingness through their effect on the dissolution propensity. Measures of the percent female divorced in each city and divorce and custody laws, are the only variables from the first stage not included in the second stage because they are expected to be directly related to the likelihood of divorce and its cost, but not to the likelihood of marriage. We identify the independent effect of the dissolution risk index through these exclusionary restrictions.

Our results indicate that parents' risk of marital dissolution as measured by the dissolution propensity significantly and substantially decreases their odds of marriage within three years of their child's birth even after controlling for personal, partner, and relationship characteristics. Looking across the columns, we see that the dissolution propensity is statistically significant in all models as parents' relationship, demographic, socioeconomic, and other characteristics are included. Because the impact of the dissolution propensity falls (the odds ratio moves closer to one) as other explanatory variables are added, this implies that the dissolution propensity is mediated, in part, by these indicators of the couples' relationship and each partners' individual characteristics.

To put the magnitude of this effect into perspective, our numbers from the full model imply that all else constant, an unmarried mother with a dissolution propensity that is one standard deviation above the mean would have a likelihood of marriage that was 3.4 percentage points lower than a mother with the mean dissolution propensity. This number is calculated by converting the odds ratio on the dissolution propensity from Model 5 into a marginal probability and multiplying by the standard deviation of the dissolution propensity, .224.⁷

Turning to the effect of other variables, in Model 4, we see important differences in the propensity to marry by parents' demographic and socioeconomic characteristics. Couples in which both partners are white have about double the odds of marrying within three years of their child's birth than Black couples, whereas the odds are about 1.7 times higher for Hispanic and mixed race or ethnic couples. Marriage is also much more likely when fathers are employed at the time of the birth and have higher hourly wages. Note that these effects are present even after controlling for their indirect effects through the predicted dissolution propensity. Although marriage is positively related to mother's education, women's employment and educational characteristics do not significantly influence this transition after other variables are taken into account.

The results do not change notably in Model 5 which adds indicators of multi-partner fertility, fathers' incarceration, substance use problems, conflict, abuse, shared activities, and religiosity. In the full model, we see that the dissolution propensity, couples' relationship status at the birth, their race/ethnic characteristics, fathers' employment and wages, and mothers' religious attendance are the best predictors of whether unmarried couples will marry within three years of having a child together.

⁷The marginal probability effect is calculated as $(P(1-P)\beta_4)$, from the logit $\Pr(\text{Mar}) = (1/1+\exp(-X\beta))$, where P is the mean probability of marrying the father within 3 years and β_4 is logit coefficient on the divorce propensity variable (see eq. 1b).

Sensitivity Analyses

We ran a number of sensitivity analyses to test for interactions, non-linearities, and biases due to a different distribution of underlying characteristics in the married and unmarried at birth samples. First, we included interactions between the predicted dissolution propensity and several variables that might be expected to increase mothers' sensitivity to divorce or increase their perception of the cost of divorce such as growing up in a disrupted household, religiosity, and parents' race/ethnic characteristics. Although our results suggest that mothers who attend religious services and couples who are White or of mixed race/ethnicity may be more sensitive to divorce, these interactions are less strongly related to marriage than other variables in the models and do not attain statistical significance (results available upon request).

Second, we ran a specification that included quadratic and cubic terms for the divorce propensity to test whether the response to the divorce propensity was non-linear. However, the coefficients on the non-linear terms were not significant predictors of the transition to marriage (results available upon request).⁸

Third, we examined whether it was appropriate to use a sample of initially married mothers who have different characteristics than unmarried mothers for the regression that generates the dissolution propensity. One way to mitigate this problem is to restrict the initially married sample to those who are most similar to the initially unmarried sample, and use that restricted sample to estimate the regression that generates marital dissolution probabilities. If the results using the full sample of initially married women are similar to the results using the restricted sample, then we can assume that any misspecification problems are not likely to be large. If the results are different, however, this suggests that our results may not generalize to those with more advantaged backgrounds.

To check the sensitivity of our results, we used several different criteria to create comparable samples of initially married and unmarried parents. For example we ran three different logit models to estimate the propensity of being in the initially unmarried sample, using different subsets of characteristics: 1) all demographic, socioeconomic, and relationship characteristics, 2) all demographic and socioeconomic characteristic, and 3) race and age. The samples of initially married and unmarried parents were then restricted to those which were most similar on propensity score matches from these logits, and these restricted samples were used for estimating the marital dissolution and marriage regressions. In addition to matching the samples on different subsets of variables, we also examined propensity scores for each of these models at two different cut-offs (i.e., .4 and .5). As an alternative strategy to using a propensity score approach, we also restricted the sample by doing an exact match on education in an additional model since this variable had a distribution which differed between the two samples. A summary of these seven sensitivity analyses is presented in Table A2. We find that the results in the restricted samples are generally very similar to those in full samples on our main variable of interest - the predicted probability of marital dissolution, suggesting that our results can be generalized to the full sample.

⁸We also ran specifications for models reported in Table 5 using event history analysis. Note that this analysis required us to use dates of marriage reported at the one and three year survey, and we could not use cases when this information was not reported or when mothers gave inconsistent reports of when they married. Despite the reduced sample size for this analysis, the results are very similar for models 1–4 across all the different event history specifications we ran (cox proportional hazard, log logistic, and weibull). However, the reduced sample in the event history models, combined with collinearity in a few of the variables, produces results in the final stage that are a little less stable. Specifically, when the sample is reduced due to missing data on marriage dates, the divorce propensity variable loses significance in the final specification, but only in models when the father incarceration variable is included. We also ran our original logit specification on this reduced sample, and the results were similar to the event history analysis. These results suggest that the discrepancy in final stage was due to the using a different sample rather than a different functional form.

Discussion and Conclusions

Recent cohorts of adults grew up during a time when divorce was common in American society. Many young men and women have experienced the divorce of their own parents, and others have been exposed to divorce indirectly. Although divorce and marriage propensities are negatively correlated in aggregate U.S. time-series data, little prior research has investigated the connection between divorce and marital decisions holding constant other confounding determinants of marriage such as individual characteristics, those of the current partner, and the relationship quality. Results from Fragile Families data indicate that unmarried parents with a higher predicted probability of marital dissolution had significantly and substantially lower odds of marriage to the child's father within three years of their child's birth. The magnitude of dissolution propensity diminished but remained significant even after other factors highly associated with marriage, such as parents' demographic, socioeconomic, and relationship characteristics were taken into account. Our results indicate that the risk of dissolution works independently of these factors. In particular, since our dissolution index is also a function of the percent divorced in the respondent's city of residence, our results are consistent with the argument that the high prevalence of divorce has produced a fear of divorce, leading some unmarried parents of young children to delay or avoid marriage.

Because the necessary information to calculate divorce propensities is not available in other data sets, our analysis of marriage is restricted to the sample of initially unmarried parents in the Fragile Families and Child Wellbeing Study, and we are not able to test whether our results apply to unmarried individuals, more generally. However, our data has the important advantage of allowing us to assess the role of divorce expectations, holding characteristics of the specific partner and relationship quality constant. In a broader analysis of marriage decision of parents and non-parents, many respondents would not currently be in a relationship, and the relevant controls would be characteristics of potential partners, which are very difficult to capture with any specificity. In addition, our sample of unmarried parents is a group that is of significant academic and policy interest.

In light of a large body evidence on the negative consequences of divorce, particularly for children (e.g., McLanahan and Sandefur, 1994), an important goal of policies aimed at strengthening two-parent families has not only been to encourage marriage but also to prevent marital dissolution. For unmarried couples, this goal has often been advanced through marriage education and preparation programs that focus on building partners' relationship skills and, to a lesser extent, assessing their compatibility before marriage (Dion, 2005). We suggest that new policies aimed at strengthening marriage should consider the long-term viability of the marriages that unmarried parents would enter into since couples themselves seem to be selecting out of marriages that are most likely to end in divorce. In these high risk cases, supporting parents' choice to heed the warning signs of marital instability may often be more consistent with the objective of preventing divorce than encouraging marriage (Huston and Melz, 2004).

One limitation of our study is that we can only observe couples' relationship transitions within three years of their child's birth. Although it is likely that a large proportion of transitions have already occurred by this time (e.g., Bramlett and Mosher, 2002), we would expect more couples to marry later. Another limitation is that these survey data do not allow us to distinguish couples that legally divorced, making it difficult to tease out the effects of laws regulating divorce in the regression results. It is possible that if the legal process for divorce was less adversarial, couples may be less hesitant to risk marriage. Future research should further examine how the legal climate for divorce influences couples' marital decisions. Although the stigma of divorce seems to have decreased, our findings suggest that unmarried parents' caution about marriage is related to a strong fear of divorce. Future research should also examine how widely these

beliefs are shared by other young, unmarried adults who do not have children as well as the emergence of these beliefs.

Acknowledgments

The Fragile Families and Child Wellbeing Study is funded by the National Institute of Child Health and Human Development (NICHD) and a consortium of agencies and foundations. Previous versions of this paper were presented at the National Poverty Center Conference, Washington, D.C., September 4–5, 2003, the National Welfare Research and Evaluation Conference, Washington, D.C., May 26, 2004, and the American Sociological Association Annual Meeting, San Francisco, August 14, 2004. We would like to thank Suzann Eshleman, Jean Knab, Dan Lichter, Jamie Rubenstein, Joe Sabia, and Ning Zhang.

References

- Amato PR, Rogers SJ. A longitudinal study of marital problems and subsequent divorce. *Journal of Marriage and Family* 1997;59:612–624.
- Amato PR. Explaining the intergenerational transmission of divorce. *Journal of Marriage and Family* 1996;58:628–640.
- Atkinson, J. *Modern Child Custody Practice*. Charlottesville, VA: Michie/Butterworth; 1996.
- Becker, GS. *A Treatise on the Family*. Cambridge, MA: Harvard University Press; 1991.
- Becker GS, Landes EM, Michael RT. An economic analysis of marital instability. *The Journal of Political Economy* 1977;85:1141–1188.
- Booth A, Edwards JN, Johnson DR. Social integration and divorce. *Social Forces* 1991;70:207–224.
- Bramlett, MD.; Mosher, WD. Cohabitation, marriage, divorce, and remarriage in the United States. National Center for Health Statistics. *Vital Health Stat.* 2002. Retrieved June 2, 2007, from http://www.cdc.gov/nchs/data/series/sr_23/sr23_022.pdf
- Brown SL. Union transitions among cohabitators: The significance of relationship assessments and expectations. *Journal of Marriage and Family* 2000;62:833–846.
- Bumpass LL, Castro-Martin T, Sweet JA. The impact of family background and early marital factors on marital disruption. *Journal of Family Issues* 1991;12:22–42. [PubMed: 12316638]
- Bumpass LL, Sweet JA. Differentials in marital instability: 1970. *American Sociological Review* 1972;37:754–766.
- Carlson M, McLanahan SS, England P. Union formation in fragile families. *Demography* 2004;41:237–261. [PubMed: 15209039]
- Castro-Martin T, Bumpass LL. Recent trends and differentials in marital disruption. *Demography* 1989;26:37–51. [PubMed: 2737357]
- Cherlin, AJ. *Marriage, Divorce, and Remarriage*. Cambridge, MA: Harvard University Press; 1992.
- Cherlin AJ, Burton LM, Hunt TR, Purvin DM. The influence of physical and sexual abuse on marriage and cohabitation. *American Sociological Review* 2004;69:768–789.
- Clarkberg M. The price of partnering: The role of economic well-being in young adults' first union experiences. *Social Forces* 1999;77:945–968.
- Clarke L, Short JF Jr. Social organization and risk: Some current controversies. *Annual Review of Sociology* 1993;19:375–399.
- Dion MR. Healthy marriage programs: Learning what works. *The Future of Children* 2005;15:137–156.
- Douglas, M.; Wildavsky, A. *Risk and Culture: An Essay on the Selection of Technical and Environmental Dangers*. Berkeley: University of California Press; 1982.
- Edin, K.; Kefalas, M. *Promises I Can Keep: Why Poor Women Put Motherhood before Marriage*. Berkeley: University of California Press; 2005.
- Ellwood, DT.; Jencks, C. The uneven spread of single-parent families. In: Neckerman, K., editor. *Social Inequality*. New York: Russell Sage; 2004. p. 3-77.
- Friedberg L. Did unilateral divorce raise divorce rates? Evidence from panel data. *American Economic Review* 1998;88:608–627.
- Gibson-Davis CM, Edin K, McLanahan S. High hopes but even higher expectations: The retreat from marriage among low-income couples. *Journal of Marriage and Family* 2005;67:1301–1312.

- Goldstein JR, Kenney CT. Marriage delayed or marriage foregone? New cohort forecasts of first marriage for U.S. women. *American Sociological Review* 2001;66:506–519.
- Graefe DR, Lichter DT. When unwed mothers marry: The marital and cohabiting partners of midlife women. *Journal of Family Issues* 2007;28:595–622.
- Gruber J. Is making divorce easier bad for children? The long run implications of unilateral divorce. National Bureau of Economic Research Working Paper 2000:w7968.
- Hatchett, S.; Veroff, J.; Douvan, E. Marital instability among Black and White couples in early marriage. In: Tucker, MB.; Mitchell-Kernan, C., editors. *The Decline in Marriage among African Americans*. New York: Russell Sage; 1995. p. 177-218.
- Hoffman SD, Duncan GJ. The effect of incomes, wages, and AFDC benefits on marital disruption. *Journal of Human Resources* 1995;30:19–42.
- Huston TL, Melz H. The case for (promoting) marriage: The devil is in the details. *Journal of Marriage and Family* 2004;66:943–958.
- Katz, SN. *Family Law in America*. New York: Oxford University Press; 2003.
- Lichter DT, Graefe DR, Brown JB. Is marriage a panacea? Union formation among economically disadvantaged unwed mothers. *Social Problems* 2003;50:60–86.
- Lichter, DT.; Graefe, DR. Finding a mate? The marital and cohabitation histories of unwed mothers. In: Wu, LL.; Wolfe, B., editors. *Out of Wedlock: Causes and Consequences of Nonmarital Fertility*. New York: Russell Sage Foundation; 2001. p. 317-344.
- Lopoo LM, Western B. Incarceration and the formation and stability of marital unions. *Journal of Marriage and Family* 2005;67:721–734.
- Maddala, GS. *Limited dependent and qualitative variables in econometrics*. New York: Cambridge University Press; 1983.
- Manning W, Smock P. Why marry? Race and the transition to marriage among cohabitators. *Demography* 1995;32:509–520. [PubMed: 8925943]
- McLanahan, SS.; Casper, L. Growing diversity and inequality in the American family. In: Farley, R., editor. *State of the Union: America in the 1990's*. Vol. Vol. 2. New York: Russell Sage; 1995. p. 1-45.
- McLanahan, S.; Sandefur, G. *Growing Up with a Single Parent: What Hurts, What Helps*. Cambridge, MA: Harvard University Press; 1994.
- McLanahan SS, Bumpass LL. Intergenerational consequences of family disruption. *American Journal of Sociology* 1988;94:130–152.
- Mincy, R., editor. *Black Males Left Behind*. Washington, D.C: Urban Institute Press; 2006.
- Morgan SP, Rindfuss RR. Marital disruption: Structural and temporal dimensions. *American Journal of Sociology* 1985;90:1055–1077.
- Oppenheimer VK. Comment on The rise of divorce and separation in the United States, 1880–1990. *Demography* 1997;34:467–472.
- Oppenheimer VK. Cohabiting and marriage during young men's career-development process. *Demography* 2003;40:127–149. [PubMed: 12647517]
- Oppenheimer VK, Kalmijn M, Lim N. Men's career development and marriage timing during a period of rising inequality. *Demography* 1997;34:311–330. [PubMed: 9275242]
- Osborne C. Marriage following the birth of a child for cohabiting and visiting parents. *Journal of Marriage and Family* 2005;67:14–26.
- Pleck, JH.; Masciadrelli, BP. Paternal involvement by U.S. residential fathers. In: Lamb, ME., editor. *The Role of The Father in Child Development*. Vol. 4th ed.. New York: Wiley; 2004. p. 222-271.
- Raley RK, Bumpass L. The topography of the divorce plateau: Levels and trends in union stability in the United States after 1980. *Demographic Research* 2003;8:245–260.
- Reichman N, Teitler J, Garfinkel I, McLanahan SS. The Fragile Families and Child Wellbeing Study: Sample and design. *Children and Youth Services Review* 2001;23(45):303–326.
- Ruggles S. The rise of divorce and separation in the United States, 1880–1990. *Demography* 1997;34:455–466. [PubMed: 9545625]
- Sanchez LA, Manning WD, Smock PA. Sex-specialized or collaborative mate selection? Union transitions among cohabitators. *Social Science Research* 1998;27:280–304.

- Sargent, TJ. Rational expectations. In: Henderson, DR., editor. *The Concise Encyclopedia of Economics*. 2002. Online available at: <http://www.econlib.org/library/Enc/RationalExpectations.html>
- Schoen R, Standish N. The retrenchment of marriage in the US. *Population and Development Review* 2001;27(3):55–563.
- Smock P, Manning W. Cohabiting partners' economic circumstances and marriage. *Demography* 1997;34:331–341. [PubMed: 9275243]
- South SJ. Do you need to shop around? Age at marriage, spousal alternatives, and marital dissolution. *Journal of Family Issues* 1995;16:432–449. [PubMed: 12346413]
- Stetson DM, Wright GC. The effects of laws on divorce in American states. *Journal of Marriage and Family* 1975;37:537–547.
- Sweeney MM. Two decades of family change: The shifting economic foundations of marriage. *American Sociological Review* 2002;67:132–147.
- Sweeney MM, Cancian M. The changing importance of white women's economic prospects for assortative mating. *Journal of Marriage and Family* 2004;66:1015–1028.
- Teachman JD. Stability across cohorts in divorce risk factors. *Demography* 2002;39:331–351. [PubMed: 12048955]
- Thomas DL, Cornwall M. Religion and family in the 1980s: Discovery and development. *Journal of Marriage and Family* 1990;52:983–992.
- Thornton A. Influence of marital history of parents on the marital and cohabitational experiences of children. *American Journal of Sociology* 1991;98:868–894.
- U.S. Census Bureau. PCT7. Sex by marital status by age for the population 15 years and over, Census 2000 Summary File 3 (SF 3)." 2000. Retrieved January 9, 2006 (<http://factfinder.census.gov/>)
- Ventura, SJ.; Bachrach, CA. National Vital Statistics Reports, 48, 16. Hyattsville, Md.: National Center for Health Statistics; 2000. Nonmarital childbearing in the United States, 1940–99.
- White L, Rogers SJ. The economic context of relationship outcomes: A decade in review. *Journal of Marriage and Family* 2000;62:1035–1051.
- Whitehead, B.; Popenoe, D. The National Marriage Project. Rutgers University; 2002. Why men won't commit: Exploring young men's attitudes about sex, dating and marriage. Retrieved January 27, 2006. (<http://marriage.rutgers.edu/Publications/SOOU/TEXTSOOU2002.htm>)
- Wilcox WB, Wolfinger NH. Then comes marriage? Religion and marriage in urban America. *Social Science Research* 2007;36:569–589.
- Wilson, WJ. *When Work Disappears: The World of the New Urban Poor*. New York: Knopf; 1996.
- Wolfers J. Did unilateral divorce laws raise divorce rates? A reconciliation and new results, NBER Working Papers 10014. National Bureau of Economic Research. 2003

Appendix

Table A1

Odds Ratios from Logistic Regression Model of the Determinants of Marital Dissolution at Year Three for Those Married at Child's Birth (n = 1009)

Mother's Age	.95*
Both White	.74
Both Hispanic	.66
Mixed Race or Ethnic Couple	1.01
Mother Has at Least Some College Education	.49**
Mother Employed in Last 12 Months	1.05
Father Currently Employed	1.40
Father's Hourly Wage	.99
Mother Lived with Both Biological Parents at Age 15	.81
Mother Has Children with Another Partner	1.24
Father Has Children with Another Partner	1.60
Father Has Been Incarcerated	1.89*
Mother Has Substance Use Problem	.75
Father Has Substance Use Problem	1.40
Conflict Index	1.24***
Mother Abused by Father ^a	1.49
Mother and Father Visited Friends Together in Last Month	.55*
Mother Attends Religious Services at Least Several Times a Month	.72
Percent Female Divorced in City	1.19*
Unilateral No Fault Divorce	.69
Presumption of Joint Custody	.60
Likelihood Ratio	128.76***

Note: All variables are measured at baseline except for incarceration and children with other partners which are measured at 12–18 months and abuse which is based on baseline and retrospective reports at the 12–18 month survey. We generally use mothers' reports, occasionally supplemented by fathers' reports. In addition to the above variables, the regression model includes dummy variables that represent missing data for fathers' employment and incarceration, children with other partners, substance use, relationship conflict, and abuse that are not shown in the table.

* $p < .05$

** $p < .01$

*** $p < .001$

Table A2

Summary of Sensitivity Analyses Using Matched Samples of Married and Unmarried Parents

Match Level	Characteristics Used to Match Married and Unmarried Parents	Dissolution Propensity
0.5	All	.01*
0.4	All	.02**
0.5	SES and demographic	.02**
0.4	SES and demographic	.12*
0.5	Race and age	.13
0.4	Race and age	.15 ⁺
Exact Match	Mother has high school degree or less	.04*

Note: Results for the dissolution propensity shown for the final model (Model 5) with full set of controls.

⁺ $p < .10$

* $p < .05$

** $p < .01$

*** $p < .001$

Table 1

Descriptive Statistics for Sample Variables by Marital Status at Child's Birth

	Married at Child's Birth	Unmarried at Child's Birth
Marriage Dissolved within 3 Years (%)	11.4	---
Married within 3 Years (%)	---	13.5
Cohabiting with Child's Father (%)	---	48.9
Romantically Involved Child's Father, Not Cohabiting (%)	---	35.4
No Romantic Relationship with Child's Father (Omitted) (%)	---	15.6
Mother's Age	29.3 (5.7)	23.8 (5.5)
Mother Lived with Both Biological Parents at Age 15 (%)	65.5	35.4
Both White (%)	39.1	9.4
Both Black (%) (Omitted)	21.9	51.4
Both Hispanic (%)	19.9	22.5
Mixed Race or Ethnic Couple (%)	19.0	16.6
Mother Has at Least Some College Education (%)	61.1	23.6
Mother Employed in Last 12 Months (%)	73.1	68.3
Father Currently Employed (%)	91.0	68.4
Father's Hourly Wage	16.9 (14.3)	9.4 (8.1)
Mother Has Children with Another Partner (%)	15.5	41.3
Father Has Children with Another Partner (%)	18.2	42.0
Father Has Been Incarcerated (%)	8.9	35.2
Mother Has Substance Use Problem (%)	1.5	3.3
Father Has Substance Use Problem (%)	2.5	6.1
Conflict Index	7.9 (1.8)	8.8 (2.4)
Mother Abused by Father (%)	3.6	10.7
Mother and Father Visited Friends Together in Last Month (%)	86.0	67.5
Mother Attends Religious Services Several Times a Month (%)	51.7	34.2
Percent Female Divorced in City (%)	8.6 (1.8)	
Unilateral No Fault Divorce (%)	45.3	
Presumption of Joint Custody (%)	17.7	
Dissolution Propensity Index	.11 (.13)	.33 (.22)
Sample Size	1009	2994

Note: Standard deviations are reported in parentheses. All variables are measured at baseline except for marriage and marital dissolution which are measured 36 months after the birth, incarceration and children with other partners which are measured at 12–18 months, and abuse which is based on baseline and retrospective reports at 12–18 months. We generally use mothers' reports, occasionally supplemented by fathers' reports.

Table 2
Odds Ratios from Logistic Regression Models of the Determinants of Marriage at Year Three for Those Unmarried at Child's Birth (n = 2994)

	(1)	(2)	(3)	(4)	(5)
Dissolution Propensity	.02***		.04***	.08***	.15*
Cohabiting with Child's Father		12.17***	8.0***	7.23***	6.95***
Romantically Involved, Not Cohabiting with Father		3.95***	3.14**	3.38**	3.21**
Mother's Age				0.99	0.99
Both White				2.10***	2.30***
Both Hispanic				1.72***	1.90***
Mixed Race or Ethnic Couple				1.68**	1.78**
Mother Has at Least Some College Education				1.12	1.22
Mother Employed in Last 12 Months				1.03	1.03
Father Currently Employed				1.93***	1.77**
Father's Hourly Wage				1.02**	1.02**
Mother Lived with Both Parents at Age 15				0.90	0.91
Mother Has Children with Another Partner					1.20
Father Has Children with Another Partner					0.92
Father Has Been Incarcerated					0.91
Mother Has Substance Use Problem					1.07
Father Has Substance Use Problem					0.68
Conflict Index					0.99
Mother Abused by Father					1.01
Mother and Father Visited Friends Together					1.05
Mother Attends Religious Services					1.31*
Likelihood Ratio	167.32***	182.33***	270.64***		338.23***

Note: All variables are measured at baseline except for incarceration and children with other partners which are measured at 12–18 months and abuse which is based on baseline and retrospective reports at the 12–18 month survey. We generally use mothers' reports, occasionally supplemented by fathers' reports. In addition to the above variables, the regression model includes dummy variables that represent missing data for fathers' employment and incarceration, children with other partners, substance use, relationship conflict, and abuse that are not shown in the table.

* $p < .05$.

 $p < .01$.

 $p < .001$