

How Do Welfare and Employment Influence Relationships between Unmarried Parents?

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Abstract

While researchers have devoted a great deal of attention to whether welfare influences marriage rates, they have rarely evaluated how moving on or off welfare can affect the quality of relationships between unmarried parents. Using data from the Fragile Families and Child Wellbeing Study, I show that even though there is a high degree of stability in reports of relationship quality, welfare and employment transitions are associated with changes in both objective and subjective indicators of relationship quality among unmarried parents. Transitions into employment are associated with improvements in fathers' emotional support, while transitions onto welfare are associated with increases in domestic violence. In turn, relationship quality is a highly significant predictor of whether unmarried couples either marry or separate. Because of how strongly relationship quality predicts these relationship transitions, even modest changes in emotional supportiveness and domestic violence are likely to have some effect on the likelihood of marriage or separation.

How Do Welfare and Employment Influence Relationships between Unmarried Parents?

In the wake of the 1996 Personal Responsibility and Work Opportunities Reconciliation Act (PRWORA), unprecedented numbers of mothers left the welfare rolls and many of them started working (Greenberg and Rahmanou 2003; Blank 2002). These changes occurred in the wake of a major demographic transition between the mid-1960s and mid-1990s, in which marriage and childbearing became increasingly decoupled for women with low levels of education, and the number of children born outside marriage rose rapidly (Ellwood and Jencks 2004; McLanahan 2004). Given that having a non-marital birth also lowers the likelihood of subsequent marriage (Bennett, Bloom, and Miller 1995; Upchurch and Lillard 2001), single parenthood has become increasingly common for less-educated women. This combination of demographic change and policy reform has radically altered the relationship between welfare, work, and family.

Despite the fact that employment has become more common and marriage has become less common in the lives of poor women over the past several decades, researchers have rarely studied how welfare and employment affect family relationships beyond simply asking whether single mothers marry. There is a rapidly growing body of literature which examines the importance of marriage as an anti-poverty strategy (Thomas and Sawhill 2002; Lichter, Graefe, and Brown 2003; McLanahan 2003), and the important precursors for marital unions among poor couples (Edin and Kefalas 2005; Lichter et al. 2006; Carlson et al. 2004). A separate body of research studies how the shift from welfare to work affects children (Gennetian and Morris 2003; Chase-Lansdale et al. 2003), parent-child relationships (Chase-Lansdale and Pittman 2002; Dunifon, Kalil, and Danziger 2003; Zaslow and Eldred 1998), and maternal mental health (Quint et

al. 1997; Bitler, Gelbach, and Hoynes 2005; Kaestner and Tarlov 2006), but has largely ignored how the relationships between parents are affected. This paper extends both of these research traditions by examining how welfare and employment transitions influence relationships between unmarried parents. In doing so, it moves beyond marriage as the sole outcome of interest in order to gain a more nuanced understanding of relationship dynamics in poor families.

I use longitudinal data from the Fragile Families and Child Wellbeing Study to examine how mothers' exits out of, and entry into, welfare and employment influence changes in objective and subjective measures of relationship quality between parents after they had a nonmarital birth. My findings suggest that both employment and welfare transitions are associated with changes in relationship quality between unmarried parents. I next use event history analysis to model the transitions these unmarried couples make either into marriage or out of their relationship with their child's father. I include time-varying measures of relationship quality and provide evidence that relationship quality, employment transitions, and welfare transitions are all important predictors of future relationship transitions. Taken together, these results suggest that parental relationship quality may be sensitive to welfare and employment transitions, and that relationship quality is a potential mechanism through which unmarried parents form more lasting, stable unions.

THEORY AND RESEARCH

Not only are women exiting welfare and entering employment in unprecedented numbers, they are doing so largely outside of marriage. However, marriage continues to be an important target for both public policy and for many unmarried women (Edin and Kefalas

2005; Lichter et al. 2004). There is a voluminous literature on the cross-sectional, longitudinal, and state-level relationships between welfare participation and marriage (see Moffitt 1998 for a review of this work). There is also an emerging body of research examining the relationship between welfare-to-work transitions and marriage (e.g. Cherlin and Fomby 2004; Gennetian and Miller 2000). In contrast, the research literature on employment and relationship quality has been mainly restricted to middle class families. Recent work has begun to examine the relationship dynamics in low-income families, but this work rarely focuses on welfare or employment as key independent variables or on how relationship quality changes over time.

Marriage

In reviewing the literature on AFDC, where the bulk of welfare research has been concentrated, Moffitt (1998) concludes that most studies find welfare is negatively related to marriage and positively related to fertility. More recent research on TANF after 1996 shows the same pattern (Teitler et al. 2006). In the cross-section, it is evident that mothers who receive welfare are less likely to be married than those who are not. While much of this has been attributed to a poverty effect, rather than a welfare effect per se, mothers on welfare are still less likely to be married than other poor mothers who are eligible for welfare but do not receive it (Teitler et al. 2003). This picture becomes considerably more complicated when one examines longitudinal patterns of welfare participation. Most of these studies find a weak negative association between welfare participation and both current and future marriage (Lichter et al. 1992; Brien 1997; Smock and Manning 1997; Blank 1999). For example, Vartanian and McNamara (2004) found that prior to 1996, participating in AFDC for two or more years was negatively associated with getting married in subsequent years. In contrast, Teitler et al. (2006)

found that after 1996, the likelihood of getting married was still reduced while mothers are receiving TANF, but once a mother left TANF her past welfare receipt no longer had much effect on her likelihood of getting married.

After 1996, welfare participation became a short term, time-limited experience, and researchers have started to move away from a static consideration of welfare participation to a more dynamic consideration of welfare and employment entries and exits. While most research considering entries and exits has examined outcomes such as economic well-being (Danziger et al. 2002; Cancian et al. 1999; Danziger et al. 2000), psychological well-being (Quint et al. 1997; Bitler, Gelbach, and Hoynes 2005; Kaestner and Tarlov 2006), or parent-child interactions (Chase-Lansdale and Pittman 2002; Dunifon, Kalil, and Danziger 2003; Zaslow and Eldred 1998), several studies have examined parental relationship status. Cherlin and Fomby (2004) found that marital transitions were related to TANF transitions, but cohabiting transitions were not. Likewise, in a fixed effects analysis of three cities after welfare reform, Moffitt and Winder (2004) found that women who left welfare were more likely to live with an employed partner than women who remained on welfare, and the male partners of welfare leavers earned more than the partners of stayers. Findings from the experimental Minnesota Family Investment Program (MFIP) study indicate that single mothers who increased their earnings were both more likely to get married and more likely to stay married (Gennetian and Miller 2000). These findings from a more dynamic consideration of entries and exits suggest that welfare and employment transitions may be related to relationship status, but this line of research has not evaluated how these transitions might affect relationship quality. However, an examination of objective and

subjective indicators of relationship quality can add to our understanding of the costs and benefits of welfare and employment transitions for poor couples.

Relationship Quality

There is little work – quantitative or qualitative, experimental or observational – that examines how parental relationships, other than marital status, are impacted by maternal employment and welfare transitions. The traditional literature on marriage quality has been largely limited to married, middle class couples (Smith 1985; Warr and Perry 1982; Hoffman 1986). These studies generally find either no relationship or a small positive relationship between maternal employment and a married couple's relationship quality. Reported marital quality, in turn, is highly stable over time (Johnson et al. 1992) and is related to a host of positive outcomes, including improved physical health (Wickrama et al. 1997), relationship stability (Conger et al. 1990), and parent-child relationships (Booth and Amato 1994).

However, it is unclear whether these findings also apply to single-parent families, cohabiting couples, couples that experience financial hardship, or those that receive welfare. Relationships between poor mothers and fathers are considerably more volatile than those between affluent couples in terms of fidelity, trust, violence, and financial contributions (DeParle 2004; Edin and Kefalas 2005; Lichter et al. 2003). Cohabiting couples also experience more instability and conflict than married couples (Lichter, Qian, and Mellott 2006; Carlson, McLanahan, and England 2004).

Several recent studies have examined relationships among poor couples. Although these studies do not focus explicitly on maternal employment or welfare receipt, they do show that relationship quality is strongly associated with the likelihood of getting married among unmarried parents (Carlson, McLanahan, and England 2004; Manning 1995;

Smock 2000), and with the extent to which non-resident fathers are involved with their children (Marsiglio et al. 2000). Abuse and domestic violence make transitions into marriage especially unlikely (Cherlin et al. 2004). While demonstrating that positive relationships are important for forming stable unions, this research focuses on the consequences of relationship quality rather than its causes, and does not address whether relationship quality is amenable to change.

There are several possible mechanisms through which welfare and employment transitions could influence relationship quality. First, these transitions may be associated with financial insecurity in the household. Several studies have shown that relationship conflict is often caused by economic instability (Sassler and McNally 2003; Brown 2000; Conger et al. 1990). Since welfare receipt is associated with difficult economic circumstances, and since transitions between welfare and work may also be accompanied by financial insecurity, these conditions are likely to have some impact on the quality of the relationship between parents, which in turn could influence the likelihood of marriage or relationship dissolution.

Second, welfare and employment transitions could be related to parental relationship quality through their association with maternal mental health. Several experimental studies of welfare leavers have found that going to work had modest impacts on maternal mental health and parenting stress (Zaslow and Eldred 1998; Quint et al. 1997; Morris and Michalopoulos 2000). Other research on whether mental health changes as mothers leave welfare and start working is more equivocal, finding smaller or insignificant effects (Bitler, Gelbach, and Hoynes 2005; Kaestner and Tarlov 2006). However, if maternal mental health or parenting stress can be affected by welfare and employment transitions,

it is conceivable that the quality of relationships might be affected as well, partially through the impacts on mental health.

Finally, the characteristics of fathers may also influence relationship quality, above and beyond the employment and welfare decisions of mothers. Researchers have highlighted the characteristics of unmarried men in poor communities that may make them unattractive husbands, such as being unemployed, using drugs, and spending time in jail (McLaughlin and Lichter 1997; Edin and Lein 1997; Wilson 1996; South 1991). Poor women may be reluctant to share financial and decision-making power, and they may feel that marriage to an unsuitable partner would be harmful for their children and their own future prospects (Scott et al. 2002; Jarrett 1996; DeParle 2004). Therefore, the human capital and behavior of potential husbands may influence relationship quality. However, most studies of welfare and marriage have not had access to adequate data on the partners and potential husbands of poor unmarried mothers receiving welfare.

Taken together, this body of research suggests that, net of background characteristics and other confounders, entries or exits from welfare or employment may influence relationship quality between unmarried parents, which in turn may change the likelihood that the couple will either get married or end their relationship. While the existing research literature clearly predicts that high relationship quality is positively associated with marriage and negatively associated with relationship dissolution, the predicted direction of the association between welfare/employment transitions and relationship quality is more ambiguous. This paper provides a test of these predictions.

DATA AND METHODS

This study uses data from the Fragile Families and Child Wellbeing Study to examine how mothers' transitions between TANF participation and employment are related to

changes in their reported relationship quality and relationship status. The Fragile Families Study examines new mothers, their partners, and their children born between 1998 and 2000. The sample consists of about 4,700 children in 20 cities. When weighted it is representative of all U.S. cities with 200,000 people or more (see Reichman et al. 2001 for more details about the sampling strategy). The Fragile Families Study first interviewed new mothers and fathers in the hospital shortly after the birth of their child. If the father was not present, he was contacted and interviewed shortly thereafter. The study is longitudinal, with three data waves: baseline at the child's birth, a one-year follow-up, and a three-year follow-up. It contains detailed information about work experience, public assistance receipt, and family relationships. The Fragile Families data are uniquely suited to this research question both because the dataset contains detailed, repeated measures of relationship quality, and because an unusually large amount of information was collected about the characteristics of unmarried fathers.

For the purposes of this study, I restrict the sample to couples who were unmarried but romantically involved when their child was born. This includes cohabiting and dating couples, but excludes parents who were married or were not in a romantic relationship. This limits the sample to couples who are “at risk” for a transition into marriage and who have valid measures of relationship quality. Relationship quality measures are available in each wave of the survey if the couple is still together.¹ This particular sample of mothers and fathers is the main target of the relationship and marriage policies instituted after welfare reform.

¹ The Fragile Families Study also asks couples who are no longer together about their relationship quality in the last month they were together. Since these are retrospective reports of a difficult time in a relationship that has subsequently ended, the reports of negative relationship quality may be biased and are excluded from this analysis. Relationship quality is only included when it is measured at a time when couples are still romantically involved.

There is a small percentage of missing data for mothers, which is imputed for the independent variables using a regression-based imputation approach that predicts missing values using non-missing data (see Harknett and McLanahan 2004 for a similar approach using the same data). Missing data are more substantial for fathers.² Data from the fathers' surveys were used when present. When data were missing from the fathers' survey, responses from the mothers' surveys were used if available. Mothers were asked about the fathers' employment, education, and behavior at each survey wave. If the father was not interviewed, and data were not available from the mother, the data for that wave were imputed.³ Item non-response for fathers was highest for earnings (23 percent), but was closer to 10 percent for other variables. For mothers, non-response rates were usually 3 percent or less, with a high of 7 percent for parental background questions. Cases with missing data on the dependent variables (relationship quality and relationship status) were dropped.

Relationship Measures. Relationship quality is measured by one subjective indicator and one objective indicator. The subjective indicator is *Father Emotional Support*, which is a scale created by four items to measure how much the mother feels that the father supports her. On a scale from 1 (never) to 3 (often) mothers were asked how often the father: expresses love and affection, encourages the mother to do things that are important to her, listens to her when she needs someone to talk to, and really understands her hurts and joys. The scale was created by taking the mean of these items, with higher values indicating higher levels of perceived emotional support. Mothers were asked these

² The survey response rate was 75% for all unmarried fathers at the baseline survey (Carlson et al. 2004); the response rate is higher for the sample in this analysis which is restricted to romantically involved, unmarried fathers since a disproportionate amount of the non-response comes from fathers who are not involved with the mothers.

³ Results were substantively the same if listwise deletion on the independent variables was used instead. However, this resulted in a somewhat smaller sample size.

questions at each wave, resulting in three time-varying indicators of father emotional support. Measures such as these have been shown to be significant predictors of relationship status (Carlson et al. 2004) and are highly correlated with other indicators of relationship quality (Katz et al. 1996; Young 2004). The objective indicator of relationship quality is whether the mother reports an experience of *Domestic Violence* in the past year. Mothers were coded as having experienced domestic violence if they indicated that their child's father had hit or slapped them in the past year. This was asked at each survey wave. These two measures of relationship quality reflect different dimensions of a couple's relationship, one with a positive valence that involves feelings and attitudes (*Father Emotional Support*) and one with a negative valence that involves actions and behaviors (*Domestic Violence*).

Relationship Status was also determined at each survey wave. Mothers were coded as married, cohabiting, in a romantic relationship, or in no relationship with the child's father at each survey wave. Mothers were excluded (censored) once they stopped being involved with the father, even if they became involved in romantic relationships with men other than the father. This procedure was followed in order to track over time what happens to couples' relationships after they have a nonmarital birth. Examining what happens after couples end their romantic relationship is beyond the scope of this paper.

Welfare/Employment Variables. At each survey wave, mothers coded 1 if they had *Received Welfare* in the past year and 0 if they had not. Information from adjacent survey waves was compared to classify mothers' welfare transitions into one of four categories: mothers could either *Exit Welfare*, *Enter Welfare*, *Stay Off Welfare*, or *Stay On Welfare*. Similar variables were created to capture the mothers' employment

transitions. Mothers could *Exit Employment*, *Enter Employment*, *Remain Employed*, or *Remain Not Employed*.

Time-Varying Controls. Variables that were asked in all three survey waves were included as time-varying controls. Both mother's education and father's education are time varying, coded into dummy variable categories of *High School Diploma/GED*, *Some College*, or *College or More*, with *Less than High School* serving as the reference category. Parents could change to a higher educational status at each survey wave if they had completed additional years of schooling.

A father was coded as *Employed Last Year* if he or the mother reported that he had worked at all in the previous year, and *Employed All Year* if he worked a year-round, full-time job. *Father's Earnings* for the past year were also included. Fathers were coded as having been *Incarcerated* if they had been in prison at any point prior to the survey wave. Mothers were coded as *Pregnant* if they reported that they had gotten pregnant again at a subsequent survey wave. Finally, both fathers and mothers were coded as *Abusing Drugs/Alcohol* if they reported that drugs or alcohol had interfered with their daily activities or relationships in the past year or if they had used any hard drugs, such as cocaine, in the past year.

Time-Invariant Controls. Control variables that do not vary over time include mother's race (coded as *Black*, *Hispanic*, or *Other Race* with *White* being the omitted reference category), *Parents' Educational Attainment* (coded as the highest level of education obtained by either of the mothers' parents), *Lived with Both Parents* at age 15, and whether the mother had *Other Children* prior to the birth of the focal child in the Fragile Families Study. *Mother's Age* and *Father's Age* when the focal child was born were also included.

Finally, mother's attitudes towards marriage, distrust of men, and traditional gender roles were ascertained during the baseline survey and are included here as time-invariant controls. *Pro-Marriage Attitudes* were measured by the average of two statements about the importance of marriage: "It is better for a couple to get married than to just live together" and "It is better for children if their parents are married." *Distrust of Men* was measured by the average to two items: "Men cannot be trusted to be faithful" and "In a dating relationship, a man is largely out to take advantage of a woman." Finally, *Traditional Attitudes* were measured by the average of two statements: "The important decisions in the family should be made by the man of the house" and "It is much better for everyone if the man earns the main living and the woman takes care of the home and the family." All of these items have responses ranging from 1 (strongly disagree) to 4 (strongly agree). These measures are comparable to those used in Carlson et al. (2004).

Analytic Strategy

For the first part of the analysis I use OLS regression analysis with a lagged dependent variable to estimate the relationship between changes in welfare and employment status with changes in relationship quality. Equation 1 shows the regression model estimated for the subjective relationship quality measure, father emotional support:

$$\begin{aligned}
 (\text{Father Emotional Support})_{it} = & \alpha + \beta_1(\text{ExitWelf})_i + \beta_2(\text{EnterWelf})_i + \beta_3(\text{RemainWelf})_i + \\
 & + \beta_4(\text{ExitWork})_i + \beta_5(\text{EnterWork})_i + \beta_6(\text{NoWork})_i \\
 & + \beta_7(\text{Father Support})_{it-1} + \delta \mathbf{D}_i + \eta \mathbf{X}_{it-1}
 \end{aligned} \tag{1}$$

for mother i at wave t , where \mathbf{D} is a vector of the time-invariant control variables and \mathbf{X} is a vector of the time-varying control variables measured at the previous wave ($t - 1$).

The lagged measure of emotional supportiveness gives the parameters estimated in

Equation 1 the interpretation of *changes* in supportiveness. The parameters β_1 , β_2 , and β_3 are compared to the omitted reference category, mothers who did not receive welfare, and represent changes in the supportiveness of the relationship associated with leaving welfare, entering welfare, or remaining on welfare, relative to mothers who did not receive welfare. The parameters β_4 , β_5 , and β_6 represent the effect of exiting work, entering work, and not working on changes in father emotional support, relative to the omitted reference category, mothers who were consistently employed. This equation is estimated for all mothers who have valid measures of father supportiveness for t and $t - 1$, meaning that the mother must be in some type of romantic relationship with the father at both t and $t - 1$ survey waves.

A similar equation is estimated for the objective relationship quality measure, experiencing domestic violence, except that this variable is dichotomous so I used logistic regression:

$$\begin{aligned} \text{Ln}(P_{it} / 1 - P_{it}) = & \alpha + \beta_1(\text{ExitWelf})_i + \beta_2(\text{EnterWelf})_i + \beta_3(\text{RemainWelf})_i \\ & + \beta_4(\text{ExitWork})_i + \beta_5(\text{EnterWork})_i + \beta_6(\text{NoWork})_i \\ & + \beta_7(\text{Domestic Violence})_{it-1} + \delta \mathbf{D}_i + \eta \mathbf{X}_{it-1} \end{aligned} \quad (2)$$

where P_{it} is the probability of experiencing domestic violence in the past year. The exponentiated values of the parameters β_1 , β_2 , and β_3 are interpreted as the odds of experiencing domestic violence for mothers leaving welfare, entering welfare, or remaining on welfare, relative to mothers who did not receive welfare, conditional on whether the mother experienced domestic violence in the prior survey wave, $t - 1$. Likewise, β_4 , β_5 , and β_6 are interpreted as the odds of experiencing domestic violence of mothers who exit work, enter work, or do not work, relative to mothers who were consistently employed. Both equations (1) and (2) are estimated with robust standard

errors to take into account the clustering of observations within cities and the fact that mothers could contribute multiple observations if they were in the same relationship at all three survey waves.

For the second part of the analysis, I use discrete-time event-history techniques to examine the transitions out of romantic relationships either into marriage or relationship dissolution (see Lichter et al. 2006 for a similar approach with cohabiting couples). Mothers are “at risk” and included in the dataset when they are either romantically involved or cohabiting with the father of the focal child. I generate a person-period dataset, where mothers contribute person-years to the data until they are censored, which occurs either after they get married or after they end the relationship. Mothers can contribute up to three waves of data from the baseline survey, the one-year follow-up, and the three-year follow-up. The model is estimated as follows:

$$\begin{aligned} \text{Ln}(M_{ijt} / 1 - M_{ijt}) = & \alpha + \beta_1(\text{ExitWelf})_{ij} + \beta_2(\text{EnterWelf})_{ij} + \beta_3(\text{RemainWelf})_{ij} \\ & + \beta_4(\text{ExitWork})_i + \beta_5(\text{EnterWork})_i + \beta_6(\text{NoWork})_i \\ & + \beta_7(\text{Father Support})_{ijt-1} + \beta_8(\text{Dom Vio})_{ijt-1} + \delta D_{ij} + \eta X_{ijt-1} \end{aligned} \quad (3)$$

where M_{it} is the probability of experiencing a transition into marriage when $j = 1$ or the probability of experiencing a relationship dissolution when $j = 2$. This model will test whether employment transitions, welfare transitions, and relationship quality are associated with transitions into marriage or out of relationships among unmarried parents, net of other time-constant and time-varying covariates and given that they have not already experienced the event or been censored prior to year t . Indicators for survey wave are also included in the models, and robust standard errors were estimated to account for clustering within cities.

RESULTS

Table 1 reports descriptive statistics from the baseline survey for parents who were either married or unmarried but romantically involved (either cohabiting or dating) at the time of their child's birth. I present means and frequencies for married couples in the first column, and for unmarried couples in the second column. Overall, 2,151 mothers were unmarried but romantically involved with the fathers of their children at the time the child was born. Over half of these unmarried mothers were African American, and roughly one-third of them were Hispanic. The majority of unmarried mothers grew up in single-parent households themselves, with only about 36 percent reporting living with both parents when they were 15 years old. In contrast, married mothers were more likely to be White and to have grown up with both of their parents. Over 75 percent of both married and unmarried mothers reported working in the year before their child was born, but married mothers had significantly higher earnings than unmarried mothers. Likewise, while over 90 percent of all fathers worked, married fathers' earnings were more than double the earnings of unmarried fathers. Roughly 10 percent of unmarried mothers reported receiving welfare in the past year, while only 2 percent of married mothers had done so. Unmarried mothers and fathers were more likely to report problems with drug and alcohol use, and unmarried fathers were substantially more likely to have spent time in jail. Unmarried mothers reported weaker pro-marriage attitudes, stronger distrust of men, less emotional support from fathers, and were more likely to report domestic violence in the past year. The relationship status of unmarried mothers in the sample was relatively evenly split between cohabiting (58 percent) and non-residential romantic involvement (42 percent) with the fathers.

Table 2 presents the distributions of economic and relationship characteristics for the romantically involved, unmarried couples over the three survey waves. Relative to the 10 percent of mothers who received welfare at Wave 1, more mothers began receiving welfare during Waves 2 and 3, with about 30 percent reporting welfare benefits in the past year at the two follow-ups. Mothers' employment declined in the year following the child's birth from 77 to 68 percent, and then rose to 74 percent by Wave 3. Fathers' employment was consistently high, at around 93 percent, for all three survey waves. This pattern of maternal welfare and employment receipt suggests that some mothers decrease their labor supply and go on welfare following the birth of their child. Looking at the couples' relationship status over the three survey waves, we see that the number of cohabiting relationship declines by about half, from 58 percent at Wave 1 to 30 percent at Wave 3. Likewise, the number of couples who are romantically involved drops rapidly from 42 percent at Wave 1 to 8 percent by Wave 3. About 16 percent of these cohabiting and dating couples transition into marriage, while over half of them end the relationship with the father by Wave 3. This pattern is consistent with previous research findings that cohabiting unions (Lichter et al. 2006) and relationships following non-marital births (Carlson et al. 2004) are often short-lived.

Subjective Relationship Quality and Welfare/Employment Transitions

The results of regression analyses predicting changes in father's emotional support, the subjective measure of relationship quality, are shown in Table 3. Model 1 presents the baseline regression with family background characteristics, mother's human capital characteristics, and father's human capital characteristics as independent variables. Model 2 adds the lagged measure of father supportiveness, and Model 3 adds employment and welfare transition variables. Other potentially confounding indicators of

relationship quality are included in Model 4. As noted earlier, because lagged measures of the dependent variable are included as independent variables in Models 2-4, the coefficients can be interpreted as *changes* in perceived father supportiveness.

For the full sample of unmarried mothers, Model 1 shows the baseline regression of time-invariant and time-varying covariates, including whether the mother worked in the past year and whether she received welfare in the past year. While both maternal and paternal employment are associated with higher levels of father emotional support, receiving welfare is not. Model 2 adds the lagged measure of father support. The most striking result in Model 2 is the high level of stability in partner supportiveness, indicated by the highly significant coefficient on the lagged measure of emotional support.

Mothers who were employed, and mothers who were involved with fathers who were employed, reported increases in father supportiveness relative to those who were not working. However, mothers who were receiving welfare did not experience declining relationship quality, relative to those who did not receive welfare. Including the lagged measure of emotional support does not substantially reduce the maternal employment coefficient. Other negative behavioral factors, such as drug use, do seem to have a negative effect on relationship quality.

The patterns in Model 2 are also found in Model 3, which introduces dummy variables for staying on welfare, entering welfare, and exiting welfare, relative to not receiving any welfare. It appears that welfare transitions have little impact on changes in perceived partner supportiveness among unmarried mothers. However, Model 3 also indicates that employment transitions *do* appear to be consequential, when dummy variables for entering employment, exiting employment, and not working at all are compared to the reference category of mothers who are consistently employed. Mothers

who start working report an improvement in the supportiveness of their partners. The effect of starting to work is equivalent to a non-trivial increase of 0.1 standard deviations in father emotional support. Likewise, mothers who exit employment report significant declines in the supportiveness of their partners, relative to mothers who stayed employed. Fathers' employment and parental drug use continue to be important factors in predicting changes in subjective relationship quality. These results remain significant when additional controls for prior relationship status and marriage attitudes are included in Model 4.

Objective Relationship Quality and Welfare/Employment Transitions

While domestic violence is a rare event, it is one of the most serious indicators of poor relationship quality and is quite consequential for women's future relationships (Cherlin et al. 2004). In the Fragile Families sample, domestic violence reports are rare at the baseline survey (3 percent), but increase in subsequent waves, reaching close to 10 percent. The logistic regression analyses for this second indicator of relationship quality are presented in Table 4. For each model, the first column presents the log odds coefficients and their standard errors, while the second column transforms these into odds ratios for easier interpretation. Because the lagged dependent variable is included in Models 2-4, these coefficients are again interpreted as a *change* in the log odds of experiencing domestic violence.

Model 1 of Table 4 includes measures of whether the mother worked or received welfare in the past year. While employment was unassociated with the odds of experiencing domestic violence, mothers receiving welfare were almost 2 times as likely to experience domestic violence as those who did not. Model 2 adds the lagged measure of domestic violence. The lagged variable is highly significant, demonstrating again the

highly stable nature of relationship quality over time for those who stay together; the most important predictor of future domestic violence is past experiences of domestic violence. The odds of experiencing domestic violence in a given year are 5 times greater for mothers who experienced domestic violence in the year of the previous survey, relative to those who did not. Despite this stability, Model 2 also indicates that mothers who received welfare were still 1.7 times more likely to experience domestic violence than those who did not receive welfare. However, in contrast to the earlier results for subjective relationship quality, maternal employment is not significantly associated with experiences of domestic violence, conditional on past experiences. Drug use among mothers and fathers also significantly increases the odds of experiencing domestic violence.

Model 3 adds the dummy variable indicators for welfare transitions. Mothers who exit welfare, enter welfare, and who consistently receive welfare are all significantly more likely to experience domestic violence than mothers who never receive welfare. For example, the odds of domestic violence for mothers entering welfare are almost twice the odds for mothers who did not receive welfare, even controlling for past incidents. The employment transition dummies in Model 3 are not significant, providing further evidence that maternal employment is not a consequential predictor of domestic violence. Finally, the addition of other relationship-related covariates in Model 4 does not substantively change the other results.

Results from Tables 3 and 4 indicate that transitions into employment are related to improvements in subjective relationship quality, as measured by perceived partner supportiveness while transitions into welfare are associated with an increased likelihood of domestic violence. Exiting welfare is also associated with an increased likelihood of

domestic violence. The fact that transitions on and off of welfare were more strongly associated with domestic violence than remaining on welfare suggests that the process of transitioning, rather than welfare receipt itself, may be associated with economic and relationship instability, increasing the likelihood of domestic violence. The interpretation and implications of these results will be considered more fully in the discussion section.

Relationship Transitions, Relationship Quality, and Welfare/Employment Transitions

Transitions into Marriage. Table 5 presents event history models of the transition into marriage among mothers who had a nonmarital birth and who are romantically involved with the father of their child. There were about 2,700 person-years in which unmarried parents were “at risk” for transition into marriage. The first column of each model displays the log odds and standard errors, and the second column reports the odds ratio transformations. Model 1 shows the effects of welfare receipt and employment on the transition into marriage, controlling for both time-varying and time-invariant covariates. African American mothers are significantly less likely to transition into marriage than are White mothers, which is consistent with the large body of research on racial differences in marriage rates (McAdoo 1997; Morgan et al. 1993; Patterson 1998).

The employment and welfare transition dummies in Model 1 indicate that mothers who consistently receive welfare and those who start receiving welfare are significantly less likely to get married than mothers who do not receive welfare. The odds of transitioning into marriage for mothers who start receiving welfare are only half the odds of transitioning into marriage for mothers who do not receive welfare. Additionally, mothers who exit welfare are significantly more likely to get married than mothers who remain on welfare, but they are no less likely to get married than mothers who never

receive welfare. This supports prior research evidence that past welfare receipt has less influence on marriage than current receipt (Teitler et al. 2006), and that those who get married rarely do so while receiving welfare. Employment transitions are also significantly related to marriage transitions. Interestingly, mothers who experience employment instability, whether they are exiting work, entering work, or are consistently not working, are all more likely to get married than mothers who are consistently employed between survey waves. Mothers who stop working are 1.7 times more likely to marry than mothers who keep working. This supports the theory that mothers' decisions about marriage and employment may be made jointly, even among mothers with a nonmarital birth.

In Model 2, the lagged measures of relationship quality – father emotional support and domestic violence – are added as independent variables. Both variables are strongly related to transitions into marriage. A one unit increase in partner supportiveness (for example, from “never” to “sometimes” displaying a supportive behavior), is associated with being almost twice as likely to transition into marriage. Conversely, women who experience domestic violence are only 0.4 times as likely to get married as women who do not. Prior relationship quality is clearly a strong predictor of transitions into a more serious relationship status. The addition of the relationship quality variables also does not substantively change the effects of employment and welfare transitions on the likelihood of marriage, but the magnitude of these effects are slightly reduced. This suggests that relationship quality plays only a small mediating role in explaining the associations between welfare/employment and marriage. Finally, Model 3 includes additional relationship-related predictors, including whether the mother cohabited (relative to being romantically involved or just dating) and the mother's attitudes

concerning marriage, distrust of men, and traditional gender role values. All of these variables are strongly predictive of the transition into marriage, but they do not substantially diminish the effects of relationship quality, as measured by father's emotional supportiveness and domestic violence.

Transitions Out of Relationships. Table 6 presents the event history analyses modeling the transition out of a relationship for mothers who were romantically involved with the fathers of their child following the nonmarital birth. Black mothers are much more likely than White mothers to end these relationships. Drug use among both mothers and fathers is also a significant predictor of relationship dissolution. If a father has spent time in jail, the odds of the relationship ending increase by half. In contrast, paternal employment is associated with a one third reduction in the odds that the relationship ends. Starting to receive welfare is significantly associated with relationship dissolution, as is consistently receiving welfare. In contrast, mothers who exit welfare are no more likely to end their relationships than mothers who never received welfare, and they are less likely to end their relationships than mothers who remained on welfare. Mothers who do not work, and those who stopped working, are all less likely to end their relationships than mothers who remain steadily employed across survey waves.

Relationship quality measures are added in Model 2, and again they are highly predictive of relationship dissolution. A one unit increase in father supportiveness reduces the odds of exiting the relationship by half. In contrast, domestic violence increases the odds of ending the relationship by a factor of almost seven. Inclusion of the relationship quality measures reduces the coefficients for welfare and employment transitions slightly, again suggesting a small mediating role for relationship quality. In Model 3, the additional relationship status and attitude measures are included. Cohabitors

are much less likely to end their relationships than couples who are only romantically involved. While attitudes towards marriage and traditional gender roles do not predict whether a relationship will end, mothers who are less trusting of men are more likely to be in relationships that end.

DISCUSSION AND IMPLICATIONS

This paper has investigated whether changes in welfare receipt and employment are related to relationship quality among unmarried parents. This population is of particular interest because many of these parents were born into single-parent families themselves, and they often face substantial economic and social disadvantages. They are also of interest because the marriage and relationship programs implemented under welfare reform are targeted at them.

Data from the Fragile Families and Child Wellbeing Study suggest that even though reports of relationship quality are quite stable, welfare and employment transitions were associated with changes in both objective and subjective indicators of relationship quality. Transitions into employment are associated with improvements in father emotional supportiveness. Transitions into welfare are associated with increased domestic violence. Both the absence of violence and emotional support are, in turn, highly significant predictors of getting married, while violence and lack of emotional support are significant predictors of ending a relationship. However, neither violence nor emotional support explains a large fraction of the association between employment/welfare transitions and changes in relationship status.

These findings also suggest that relationship quality is a multi-faceted concept. In particular, domestic violence has a negative valence and is associated with quite troubled relationships. The fact that it is more strongly associated with welfare transitions than

employment suggests that mothers who start receiving welfare may be experiencing difficult and stressful economic circumstances, which may in turn cause relationship conflicts that lead to experiences of domestic violence. On the other hand, father emotional support is a more subjective measure based on maternal perceptions. Mothers who start working will likely have to change family and household routines and make child care arrangements to accommodate their new work schedule. Mothers may perceive that their partners have accommodated their new routines and assisted in this transition by taking on new roles or more responsibility, thereby increasing their supportiveness.

The finding that welfare and employment transitions are associated with relationship quality is important because relationship quality itself is found to be highly predictive of transitions into marriage and out of relationships. Results from this study confirm previous research (e.g. Carlson et al. 2004) showing the importance of partner supportiveness in the formation and stability of a union. While the relationship between these variables has been established in the general population (Karney and Bradbury 1995), they are only beginning to be studied in low-income, unmarried populations. Furthermore, psychological research suggests that partners who generally have supportive relationships are better able to endure conflicts and stressful situations without breaking up than couples who lack this supportiveness (Gottman 1994).

This study adds to the literature by investigating the determinants of relationship quality, showing that maternal employment and welfare transitions are associated with changes in the quality of parental relations. Because of how strongly relationship quality predicts marriage and relationship dissolution, even modest changes in supportiveness and domestic violence are likely to have some effect on the likelihood of marriage or

relationship dissolution. These findings lend modest empirical support to the theoretical model predicting that relationship quality could be a potential mechanism through which welfare and employment transitions affect union formations and dissolutions. Future research efforts should continue to explore the determinants and variation in relationship quality among unmarried parents.

This study also builds upon most studies of transitions into marriage and out of relationships because it has more information about the characteristics of unmarried fathers, including employment, earnings, drug use, and jail time. Importantly, the changes in relationship quality found in this study occur while the mother is with the *same* partner. Therefore, it is not that mothers who start working also start dating more supportive partners. Even when they remain with the fathers of their children, they perceive that the relationship improves. Likewise, mothers who start receiving welfare experience more domestic violence while they remain with the same partner. The results suggest that fathers' human capital, incarceration, and drug use are also important predictors of relationship changes, which is consistent with previous research evidence on the importance of father's characteristics in a couple's decision about whether to marry (McLaughlin and Lichter 1997; Wilson 1996; South 1991).

Several limitations to this study should also be noted. The changes in relationship quality, status, and welfare/employment were measured over only three years. If transitions take longer to affect relationships, or if these effects are small from year to year but accumulate as time goes on, this analysis will underestimate the long-term effects.⁴ Likewise, if effects fade over time, this study may exaggerate long-term effects.

⁴ For example, while the likelihood of getting marry declines substantially after a nonmarital birth, most women eventually do get married at some point over their life course (Ellwood and Jencks 2004).

This study is also limited to mothers who have a child under four. The effects of welfare and employment transitions may change as mothers and children get older, limiting the generality of these results. It is also important to reiterate that this study looks only at couples who have had a non-marital birth. The results might be different for other unmarried couples. Many variables that one would expect to predict marriage prior to the birth of a child, such as economic resources or education, may have weaker effects in this sample of unmarried parents. However, since many welfare recipients are unmarried mothers with young children, these results do speak to a large portion of the population at risk for receiving welfare.

Finally, while this study attempts to deal with the problem of endogeneity and causality by using lagged measures of dependent variables and event history analysis with independent variables causally prior to the dependent variables, it is still possible that decisions about welfare and employment transitions are made in concert with marriage and relationship decisions, such that the temporal order of events does not fully represent a couple's actual decision-making. To the extent that this is the case, the "effects" presented in this paper may include some degree of reverse causality. This is a problem that plagues the literature on employment and marriage decisions more broadly (Ellwood and Jencks 2004).

Nevertheless, the findings from this study may have important implications for recent policy initiatives focused on low-income, unmarried parents. First, since positive relationship quality is a significant predictor of transitions into marriage, which suggests that relationship education programs that actually improve relationship quality may well lead to more stable unions. However, this study also suggests that improvements in relationship quality may be difficult to achieve since relationship quality is quite stable.

Furthermore, modest improvements in relationship quality can also be achieved through transitions into more stable employment and economic circumstances for both mothers and fathers.

The characteristics of fathers are also quite important for predicting the transition into marriage. Nonetheless, relatively few social policies focus on unmarried fathers, with the exception of child support enforcement. Relationship education programs must therefore be compared to programs that improve the financial security of poor couples, to see which type of policy does more to promote union formation and stability. Finally, mothers who start receiving welfare experience declining relationship quality along with their declining economic fortunes. These mothers may be a group in particular need of support from social policies.

Expanding research attention beyond changes in marital status to an examination of relationship quality shows that mothers who exit welfare and enter employment do experiences changes in their relationship with the father of their child. Future research should provide more detailed information about how relationships between family members are affected by welfare and employment. As we learn more about how family dynamics change as mothers transition into and out of welfare, we may be able to develop policies that are both sensitive to the challenges faced by these fragile families and are able to build upon their strengths.

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Table 1. Distributions of Variables at Time of Birth for Married and Unmarried Couples

Variable	Married Couples	Unmarried Couples
<u>Mother's Background</u>		
Black	0.26	0.56
Hispanic	0.21	0.27
Other Race	0.08	0.03
Child Male	0.53	0.53
Parents' Education		
Less than High School	0.16	0.15
High School	0.38	0.56
Some College	0.09	0.09
College or More	0.37	0.20
Lived with Both Parents at 15	0.65	0.36
<u>Mother's Characteristics</u>		
Other Children	0.65	0.62
Age at Birth	29.4 (5.7)	23.8 (5.5)
Education		
Less than High School	0.13	0.38
High School	0.20	0.35
Some College	0.30	0.24
College or More	0.37	0.03
Employed Last Year	0.77	0.77
Earnings Last Year	\$14,795 (12,807)	\$5,688 (8,274)
Welfare Last Year	0.02	0.10
Abused Drugs/Alcohol	0.03	0.08
<u>Father's Characteristics</u>		
Age at Birth	31.8 (6.3)	26.5 (7.0)
Education		
Less than High School	0.13	0.38
High School	0.24	0.39
Some College	0.30	0.21
College or More	0.33	0.03
Employed Last Year	0.98	0.93
Earnings Last Year	\$42,839 (42,336)	\$19,669 (18,079)
Ever in Jail	0.06	0.27
Abused Drugs/Alcohol	0.06	0.19
<u>Relationship Characteristics</u>		
Pro-Marriage Attitudes	3.11 (0.67)	2.76 (0.68)
Distrust of Men	1.83 (0.53)	2.06 (0.53)
Traditional Attitudes	2.09 (0.68)	2.03 (0.59)
Father Support	2.75 (0.31)	2.65 (0.36)
Domestic Violence	0.01	0.03
Cohabiting	-----	0.58
Romantically Involved	-----	0.42
N	872	2,151

Note: Numbers in parentheses are standard deviations. Descriptive statistics are unweighted.

Unmarried couples include parents who were romantically involved or cohabiting at the time of their child's birth.

Table 2. Economic and Relationship Characteristics of Couples with a Nonmarital Birth, Waves 1 - 3

Variable	Wave 1	Wave 2	Wave 3
<u>Economic Variables, %</u>			
Mother Received Welfare	10	30	26
Mother Worked	77	68	74
Father Worked	93	93	92
<u>Relationship Status Variables, %</u>			
Cohabiting	58	42	30
Romantically Involved	42	15	8
Married	-----	10	16
Not in Relationship	-----	33	47

Note: Percentages may not sum to 100 due to rounding. Survey sample total N = 2, 151. Relationship status variables indicate the relationship between the mother and biological father of the focal child.

Table 3. OLS Regressions of Father Emotional Support on Family Background, Human Capital Characteristics, and Relationship Quality

	<u>Model 1</u>	<u>Model 2</u>	<u>Model 3</u>	<u>Model 4</u>
Lagged Father Support	-----	0.450*** (0.021)	0.450*** (0.022)	0.448*** (0.022)
<u>Maternal Welfare/Employment Characteristics</u>				
Employed Last Year	0.043* (0.019)	0.041* (0.017)	-----	-----
Not Working	-----	-----	-0.021 (0.024)	-0.016 (0.024)
Left Work	-----	-----	-0.043 ⁺ (0.022)	-0.034 ⁺ (0.017)
Started Working	-----	-----	0.041 ⁺ (0.023)	0.042 ⁺ (0.023)
Welfare Last Year	-0.003 (0.021)	0.003 (0.019)		
Left Welfare	-----	-----	-0.004 (0.029)	-0.011 (0.029)
Started Welfare	-----	-----	-0.012 (0.023)	-0.014 (0.023)
Remained on Welfare	-----	-----	-0.036 (0.032)	0.036 (0.032)
<u>Mother's Background Characteristics</u>				
First Child	-0.013 (0.018)	0.014 (0.016)	0.009 (0.017)	0.013 (0.017)
Age at Birth	0.001 (0.002)	0.002 (0.002)	0.002 (0.002)	0.002 (0.002)
Education				
High School	0.038* (0.019)	0.024 (0.017)	0.031 ⁺ (0.017)	0.03 (0.017)
Some College	0.009 (0.020)	0.006 (0.019)	0.007 (0.019)	0.002 (0.019)
College or More	0.012 (0.041)	-0.031 (0.037)	-0.027 (0.038)	-0.027 (0.038)
Used Drugs	-0.077** (0.027)	-0.053* (0.024)	-0.052* (0.024)	-0.051* (0.024)
<u>Father's Characteristics</u>				
Age at Birth	-0.003* (0.001)	-0.004* (0.002)	-0.004** (0.002)	-0.004* (0.002)
Education				
High School	0.026 (0.018)	0.014 (0.017)	0.015 (0.017)	0.012 (0.017)
Some College	0.024 (0.020)	0.013 (0.018)	0.015 (0.019)	0.013 (0.019)
College or More	0.002 (0.045)	-0.028 (0.040)	-0.022 (0.041)	-0.027 (0.041)

(continued)

(Table 3, continued)

Employed Last Year	0.112*	0.087*	0.086*	0.091*
	(0.047)	(0.043)	(0.044)	(0.044)
Earnings Last Year if Employed	0.003	0.002	0.003	0.003
	(0.004)	(0.003)	(0.004)	(0.004)
Ever in Jail	-0.011	-0.004	-0.003	-0.006
	(0.021)	(0.019)	(0.019)	(0.019)
Used Drugs	-0.062***	-0.052**	-0.050**	-0.048**
	(0.019)	(0.017)	(0.017)	(0.017)
<u>Relationship Characteristics</u>				
Married	----	----	----	-0.039
				(0.034)
Cohabiting	----	----	----	-0.033
				(0.018)
Pro-Marriage Attitudes	----	----	----	-0.009
				(0.011)
Distrust of Men	----	----	----	-0.052**
				(0.015)
Traditional Attitudes	----	----	----	0.005
				(0.014)
Constant	1.485***	0.724***	0.784***	0.920***
	(0.079)	(0.081)	(0.081)	(0.093)
N	2,151	2,151	2,151	2,151
R-squared	0.033	0.199	0.020	0.205

Robust standard errors are in parentheses.

+ significant at 10% * significant at 5%; ** significant at 1%; *** significant at 0.1%

Note: Coefficients for Family Background Variables are included in models but not presented here. These variables include Race, Mothers' Parents Education, Intact Family at 16, Child Male, Whether Mother Was Pregnant in Prior Survey, and Indicators for Survey Wave.

Interactions between Welfare and Employment transitions variables were not significant.

Omitted reference categories include Less than HS education, Not Receiving Welfare, Consistently Employed, and Romantically Involved.

Table 4. Logistic Regressions of Domestic Violence on Family Background, Human Capital Characteristics, and Relationship Quality

	<u>Model 1</u>	<u>OR</u>	<u>Model 2</u>	<u>OR</u>	<u>Model 3</u>	<u>OR</u>	<u>Model 4</u>	<u>OR</u>
Lagged Domestic Violence	-----		1.670***	5.312	1.692***	5.429	1.623***	5.069
			(0.294)		(0.295)		(0.303)	
<u>Maternal Welfare/Employment Characteristics</u>								
Employed Last Year	0.018	1.018	0.078	1.081	-----		-----	
	(0.190)		(0.194)					
Not Working	-----		-----		0.003	1.003	-0.108	0.898
					(0.272)		(0.282)	
Left Work	-----		-----		-0.135	0.874	-0.13	0.878
					(0.244)		(0.244)	
Started Working	-----		-----		0.045	1.046	0.037	1.038
					(0.252)		(0.254)	
Welfare Last Year	0.638**	1.892	0.555**	1.743	-----		-----	
	(0.186)		(0.189)					
Left Welfare	-----		-----		0.546*	1.726	0.535*	1.707
					(0.202)		(0.204)	
Started Welfare	-----		-----		0.706**	2.027	0.672**	1.958
					(0.212)		(0.216)	
Remained on Welfare	-----		-----		0.473	1.604	0.429	1.535
					(0.318)		(0.327)	
<u>Mother's Background Characteristics</u>								
Other Children	0.349+	1.419	0.34+	1.404	0.275	1.316	0.251	1.286
	(0.186)		(0.188)		(0.188)		(0.189)	
Age at Birth	-0.426+	0.958	-0.042	0.958	-0.045+	0.956	-0.04	0.961
	(0.025)		(0.026)		(0.026)		(0.026)	
Education								
High School	-0.263	0.768	-0.295	0.745	-0.258	0.773	-0.294	0.745
	(0.191)		(0.193)		(0.192)		(0.195)	
Some College	0.084	1.087	0.038	1.039	0.028	1.028	0.058	1.06
	(0.204)		(0.207)		(0.207)		(0.210)	
College or More	0.479	0.815	0.327	1.387	0.346	1.413	0.326	1.385
	(0.440)		(0.450)		(0.451)		(0.453)	
Used Drugs	0.906***	2.475	0.872***	2.392	0.899***	2.456	0.926***	2.523
	(0.203)		(0.207)		(0.206)		(0.207)	
<u>Father's Characteristics</u>								
Age at Birth	-0.013	0.986	-0.013	0.987	-0.011	0.989	-0.017	0.983
	(0.019)		(0.019)		(0.019)		(0.020)	
Education								
High School	-0.052	0.948	0.038	1.039	0.034	1.035	0.044	1.045
	(0.181)		(0.185)		(0.184)		(0.185)	
Some College	-0.249	0.778	-0.209	0.811	-0.235	0.791	-0.22	0.803
	(0.221)		(0.225)		(0.224)		(0.226)	
College or More	-0.472	0.623	-0.406	0.667	-0.373	0.689	-0.344	0.709
	(0.632)		(0.640)		(0.640)		(0.639)	

(continued)

(Table 4, continued)

Employed Last Year	-0.146 (0.382)	0.863	-0.053 (0.391)	0.949	-0.024 (0.394)	0.976	-0.067 (0.394)	0.935
Earnings Last Year	0.006 (0.005)	0.999	0.006 (0.005)	0.999	0.005 (0.005)	0.999	0.006 (0.005)	0.999
Used Drugs	0.519** (0.173)	1.681	0.491** (0.176)	1.634	0.471** (0.176)	1.601	0.493** (0.177)	1.637
Ever in Jail	0.229 (0.189)	1.257	0.125 (0.195)	1.133	0.087 (0.195)	1.091	0.119 (0.196)	1.127
<u>Relationship Characteristics</u>								
Married	----		----		----		0.256 (0.407)	1.291
Cohabiting	----		----		----		0.156 (0.191)	1.169
Pro-Marriage Attitudes	----		----		----		0.124 (0.125)	1.132
Distrust of Men	----		----		----		0.108 (0.169)	1.114
Traditional Attitudes	----		----		----		0.079 (0.154)	1.083
Constant	-2.327** (0.768)		-2.540** (0.783)		-2.476** (0.781)		-3.229*** (0.924)	
N	2,257		2,257		2,257		2,257	
Pseudo R-square	0.063		0.084		0.087		0.088	

Robust standard errors are in parentheses.

+ significant at 10% * significant at 5%; ** significant at 1%; *** significant at 0.1%

Note: Coefficients for Family Background Variables are included in models but not presented here. These variables include Race, Mothers' Parents Education, Intact Family at 16, Child Male, Whether Mother Was Pregnant in Prior Survey, and Indicators for Survey Wave.

Interactions between Welfare and Employment transitions variables were not significant.

Omitted reference categories include Less than HS education, Not Receiving Welfare, Consistently Employed, and Romantically Involved.

Table 5. Event History Logit Models of Transitions from Romantic Relationships to Marriage

	<u>Model 1</u>	<u>OR</u>	<u>Model 2</u>	<u>OR</u>	<u>Model 3</u>	<u>OR</u>
<u>Maternal Welfare/Employment Characteristics</u>						
Not Working	0.311 (0.200)	1.364	0.327+ (0.203)	1.386	0.299 (0.208)	1.348
Left Work	0.479** (0.168)	1.615	0.427* (0.171)	1.533	0.359* (0.175)	1.432
Started Working	0.507** (0.183)	1.66	0.538** (0.184)	1.713	0.575** (0.189)	1.777
Left Welfare	-0.251 (0.254)	0.778	-0.254 (0.255)	0.776	-0.208 (0.258)	0.813
Started Welfare	-0.701** (0.212)	0.496	-0.648** (0.214)	0.523	-0.532* (0.216)	0.588
Remained on Welfare	-0.872** (0.330)	0.418	-0.796* (0.331)	0.451	-0.626+ (0.335)	0.534
<u>Mother's Background Characteristics</u>						
First Child	0.116 (0.135)	1.123	0.204 (0.137)	1.226	0.208 (0.140)	1.231
Age at Birth	-0.001 (0.017)	0.999	-0.001 (0.017)	0.999	0.007 (0.017)	1.007
Education						
High School	0.265+ (0.145)	1.303	0.234 (0.146)	1.264	0.256+ (0.150)	1.291
Some College	0.271+ (0.154)	1.311	0.265+ (0.155)	1.303	0.337* (0.160)	1.401
College or More	0.442 (0.276)	1.555	0.423 (0.279)	1.526	0.518+ (0.284)	1.678
Used Drugs	-0.071 (0.195)	0.932	-0.003 (0.199)	0.997	0.06 (0.203)	1.062
<u>Father's Characteristics</u>						
Age at Birth	0.006 (0.013)	1.006	0.005 (0.013)	1.005	0.001 (0.013)	1.001
Education						
High School	-0.033 (0.142)	0.968	-0.065 (0.144)	0.937	-0.084 (0.147)	0.92
Some College	0.169 (0.150)	1.184	0.168 (0.152)	1.183	0.178 (0.155)	1.195
College or More	0.976*** (0.269)	2.653	0.958*** (0.270)	2.607	1.002** (0.277)	2.724

(continued)

(Table 5, continued)

Employed Last Year	0.624 (0.474)	1.867	0.6 (0.477)	1.823	0.596 (0.488)	1.815
Earnings Last Year	0.006** (0.002)	1.00	0.007** (0.002)	1.00	0.006* (0.003)	1.00
Used Drugs	-0.246 (0.142)	0.782	-0.22 (0.144)	0.802	-0.184 (0.147)	0.832
Ever in Jail	-0.202 (0.167)	0.817	-0.176 (0.169)	0.839	-0.154 (0.174)	0.857
<u>Relationship Characteristics</u>						
Domestic Violence			-0.923* (0.401)	0.397	-1.071** (0.408)	0.343
Father Supportiveness			0.678*** (0.190)	1.969	0.539** (0.194)	1.714
Cohabiting					0.728*** (0.163)	2.07
Pro-Marriage Attitudes					0.473*** (0.094)	1.605
Distrust of Men					-0.448*** (0.128)	0.639
Traditional Attitudes					0.248* (0.115)	1.282
Constant	-3.162*** 0.663		-4.302*** 0.746		-5.773*** 0.86	
N	2,727		2,727		2,727	
Pseudo R-square	0.071		0.082		0.112	

Robust standard errors are in parentheses.

+ significant at 10% * significant at 5%; ** significant at 1%; *** significant at 0.1%

Note: Coefficients for Family Background Variables are included in models but not presented here. These variables include Race, Mothers' Parents Education, Intact Family at 16, Child Male, Whether Mother Was Pregnant in Prior Survey, and Indicators for Survey Wave.

Interactions between Welfare and Employment transitions variables were not significant.

Omitted reference categories include Less than HS education, Not Receiving Welfare, Consistently Employed, and Romantically Involved.

Table 6. Event History Logit Models of Transitions from Romantic Relationships to Dissolution

	<u>Model 1</u>	<u>OR</u>	<u>Model 2</u>	<u>OR</u>	<u>Model 3</u>	<u>OR</u>
<u>Maternal Welfare/Employment Characteristics</u>						
Not Working	-0.497** (0.173)	0.609	-0.548** (0.180)	0.578	-0.569** (0.184)	0.566
Left Work	-0.303* (0.139)	0.738	-0.293* (0.145)	0.746	-0.239 (0.149)	0.787
Started Working	-0.082 (0.143)	0.921	-0.099 (0.149)	0.906	-0.141 (0.153)	0.869
Left Welfare	-0.003 (0.187)	0.997	-0.044 (0.194)	0.957	-0.069 (0.198)	0.934
Started Welfare	0.777*** (0.119)	2.176	0.703*** (0.124)	2.02	0.628*** (0.128)	1.874
Remained on Welfare	0.470* (0.182)	1.599	0.380* (0.188)	1.462	0.311 (0.194)	1.365
<u>Mother's Background Characteristics</u>						
First Child	-0.108 (0.103)	0.897	-0.186+ (0.107)	0.83	-0.097 (0.111)	0.907
Age at Birth	-0.02 (0.013)	0.98	-0.02 (0.014)	0.98	-0.023+ (0.014)	0.977
Education						
High School	-0.059 (0.106)	0.943	-0.028 (0.110)	0.972	-0.012 (0.113)	0.988
Some College	-0.033 (0.115)	0.967	-0.055 (0.120)	0.946	-0.025 (0.123)	0.976
College or More	0.226 (0.240)	1.254	0.22 (0.246)	1.246	0.203 (0.254)	1.225
Used Drugs	0.413** (0.136)	1.512	0.239+ (0.145)	1.27	0.239 (0.148)	1.27
<u>Father's Characteristics</u>						
Age at Birth	0.002 (0.010)	1.002	0.005 (0.010)	1.005	0.01 (0.011)	1.01
Education						
High School	0.084 (0.102)	1.088	0.116 (0.106)	1.123	0.137 (0.108)	1.146
Some College	0.008 (0.119)	1.008	0.065 (0.123)	1.067	0.105 (0.126)	1.111
College or More	0.252 (0.267)	1.286	0.307 (0.274)	1.36	0.308 (0.281)	1.36

(continued)

(Table 6, continued)

Employed Last Year	-0.405+	0.667	-0.369+	0.691	-0.4+	0.67
	(0.217)		(0.225)		(0.232)	
Earnings Last Year	0.002	1.00	0.003	1.00	0.003	1.00
	(0.002)		(0.002)		(0.002)	
Used Drugs	0.228*	1.256	0.164	1.178	0.189	1.208
	(0.102)		(0.106)		(0.109)	
Ever in Jail	0.401***	1.494	0.384**	1.469	0.356**	1.428
	(0.107)		(0.111)		(0.114)	
<u>Relationship Characteristics</u>						
Domestic Violence			1.914***	6.777	2.085***	8.044
			(0.190)		(0.197)	
Father Supportiveness			-0.656***	0.519	-0.476***	0.622
			(0.130)		(0.136)	
Cohabiting					-0.925***	0.397
					(0.103)	
Pro-Marriage Attitudes					-0.058	0.944
					(0.072)	
Distrust of Men					0.290**	1.336
					(0.098)	
Traditional Attitudes					-0.051	0.95
					(0.091)	
Constant	-0.652		0.378		0.237	
	0.448		0.52		0.602	
N	2,727		2,727		2,727	
Pseudo R-square	0.058		0.105		0.136	

Robust standard errors are in parentheses.

+ significant at 10% * significant at 5%; ** significant at 1%; *** significant at 0.1%

Note: Coefficients for Family Background Variables are included in models but not presented here. These variables include Race, Mothers' Parents Education, Intact Family at 16, Child Male, Whether Mother Was Pregnant in Prior Survey, and Indicators for Survey Wave.

Interactions between Welfare and Employment transitions variables were not significant. Omitted reference categories include Less than HS education, Not Receiving Welfare, Consistently Employed, and Romantically Involved.