# **Transitions of Disadvantaged Cohabiting Women Into Marriage**

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#### **Abstract**

The objective of this paper is to identify the incentives and barriers to marriage among cohabiting women, especially disadvantaged mothers who are targets of welfare reform. We use the newly released cohabitation data from the National Longitudinal Survey of Youth (1979-2000), which tracks the partners of cohabiting women across survey waves. Most cohabiting unions are short-lived. Our results suggest that about one-half of all cohabiting unions will end within one year and 85 percent will end by the fourth year. The majority of cohabiting unions end by dissolution of the relationship rather than by marriage. Transitions to marriage are especially unlikely among poor women, although these women have breakup rates that are similar to the rest of the population. Our multinominal analysis of transitions from cohabitation into marriage or dissolution highlights the salience of family background, marital and fertility histories, and women's educational and economic resources. The receipt of welfare by poor women is associated with the dissolution of cohabiting unions, but there is little evidence that welfare discourages entry into marriage. The results provide baseline information on the marital behavior of low-income cohabitating mothers.

# **Transitions of Disadvantaged Cohabiting Women Into Marriage**

#### Introduction

Marriage promotion is at the center of current policy debates over reauthorization of the 1996 Personal Responsibility and Work Opportunity Reconciliation Act (Cherlin 2003; Sawhill 2002). Proponents claim that marriage can provide a route from poverty and welfare dependence for single mothers, while reinforcing recent national declines in welfare caseloads (Sawhill and Haskins 2002). To be sure, married women have substantially lower poverty rates than women heading families (5.3 percent vs. 26.5 percent in 2002) (U.S. Bureau of the Census 2004). But whether *transitions* to marriage among poor women provide an escape from poverty is less clear. Several recent studies have examined transitions from cohabitation to marriage (Manning and Smock 1995; Sassler and McNally 2003; Brown 2004), but few studies have focused on the process of union formation among poor cohabiting women. This is surprising. Unmarried romantic partners, including those in cohabiting unions, often intend or desire marriage but a significant share do not realize their marital preferences (Carlson, McLanahan, and England 2004; Lichter, Batson, and Brown 2004).

The objective of this paper is to provide a better understanding of the incentives and barriers to marriage among cohabiting women, especially disadvantaged mothers who are targets of welfare reform. Out of wedlock childbearing negatively affects the likelihood of marrying, staying married, and marrying an economically attractive mate (Lichter, Graefe, and Brown 2003). It is less clear whether single motherhood and poverty adversely affect transitions out of cohabitation and into marriage. In this paper,

we use the newly-released cohabitation data from the *National Longitudinal Survey of Youth* (1979-2000) to build on previous work in several important ways: (1) we use nationally-representative panel data collected over a longer time frame (i.e., 1979-2000) than most previous retrospective or community-based studies containing marriage and cohabitation histories; (2) we examine union transitions for economically-disadvantaged single women rather than for all women (or men); and (3) we identify the effects of individual, partner, and family background characteristics on union transitions among cohabiting mothers.

We provide baseline information on unmarried women who are likely the most receptive to marriage and marriage promotion initiatives, i.e., single women who are currently in cohabiting coresidential relationships with potential marriage partners, some of whom are the biological fathers of their children. Ours is an important task in light of the strong upward trend in cohabitation nationally over the past two decades and the increasing childbearing among cohabiting couples (Bumpass and Lu 2000).

## **Background**

Cohabitation has supplemented marriage as the first coresidential union for most young people. Roughly one-half of all first unions before age 25 are cohabitations (Bumpass and Sweet 1989). Estimates by Bumpass and Sweet (1989) suggest that one-third of persons will have ever-cohabited before marriage, and almost one-half will have cohabited by their early thirties (Bumpass and Lu 1999). Rapid declines in first marriage rates over the past two decades have been largely offset by increases in cohabitation (Bumpass, Sweet, and Cherlin 1991). In 2000, there were 3.8 million households headed

by unmarried couples, a number representing about 3.7 percent of all households and 6.3 percent of all couple-headed households (i.e., those that include both cohabiting couples and married couples)(Fields and Casper 2001). To fully appreciate the process of union formation today requires a much better understanding of the reasons cohabiting couples ultimately decide to marry, break up, or continue their current living arrangement.

A chronology of recent theory and research reflects the growing importance of cohabitation in the union formation process. Until recently, most previous empirical analyses of transitions to marriage assumed, either explicitly or implicitly, a rational choice model of marriage that emphasized the economic readiness of partners to marry (Lloyd and South 1996; Sweeney 2002; Xie, Raymo, Goyette, and Thornton 2003). The "gains to marriage" presumably increase with household specialization along traditional gender roles — men in market work and women in home production (Becker 1981; Oppenheimer 1997). Economic considerations (especially men's ability to be "good providers") presumably trump most other considerations in the decision to marry. Until recently, however, few studies distinguished single persons by whether they were cohabiting or not (Goldscheider and Waite 1996). Other studies considered cohabitation as a predictor of subsequent marriage rather than an outcome (Lichter et al. 1992).

More recently, cohabitation has been conceptualized as an *alternative* to marriage or a *stage* in the transition to marriage. Competing risk models of transitions from singlehood to either marriage or cohabitation have generally shown that marriage transitions are positively associated with male employment and earnings; economic factors are less strongly associated with transitions to cohabitation (Clarkberg 1999; Sassler and Goldscheider 2004). Economically attractive men presumably have many

more opportunities to marry, while a stable job at good pay makes them more receptive to the long-term financial and emotional commitments required of marriage and a stable family life. Conversely, economic uncertainly provides a poor basis for getting married.

For poor women from disadvantaged backgrounds, marriage rates are especially low, in part because these women face shortages of men to marry, especially men with stable jobs that can provide sufficient income to support a family. These women also often have characteristics themselves (e.g., low education, mental health problems, or out-of-wedlock births) that make marriage difficult to sustain (Graefe and Lichter 2002; McLaughlin and Lichter 1997). Indeed, cohabitation has been viewed as an adaptive response to economic uncertainty or other economic exigencies (e.g., layoffs or job-related moves). The disadvantaged circumstances of single persons who enter cohabitation (rather than marriage) are clearly evident in their family backgrounds (e.g., growing out in non-intact families), high unemployment, low incomes, and poor educational attainment (Bumpass and Sweet 1989; Smock 2000). The large majority of cohabitors nevertheless expect to marry their partners, and most do. Using data from the National Survey of Family Growth, Bumpass and Sweet (1989) showed that 56 percent of cohabiting couples married within five years.

In fact, there is little evidence that cohabiting couples hold anti-marriage views and therefore eschew marriage. Data from the National Survey of Families and Households indicate that 75 percent of cohabitors *planned* to marry their partner (Bumpass et al. 1991). Moreover, according to Lichter et al. (2004), nearly 90 percent of cohabiting childless women *expected* to marry, and about three-quarters of cohabiting mothers expected to marry their current partners. The receipt of welfare was negatively

associated with the expectation to marry, but this effect was statistically insignificant, as was the effect of the partner's income. The substantive implication seems clear:

Cohabiting women, even disadvantaged women, do not need to be convinced about the value of marriage. Most expect or plan to marry.

Many cohabiting women, however, do not achieve their marital expectations (Brown 2000; Lichter et al. 2004). Low economic resources may not be strongly linked to the marital expectation, but nevertheless are strongly associated with subsequent marital behavior. Indeed, a search-theoretic model of marriage suggests that cohabitation provides a venue for information gathering, including collecting information about the partner's economic circumstances and future employment prospects (Brien, Lillard, and Waite 1999). Presumably, transitions from cohabitation to marriage are hastened by adequate employment of either or both partners. This is confirmed in most previous studies (Manning and Smock 1995; Smock and Manning 1997; for exception, Sassler and McNally 2003). For example, using data from both waves of the NSFH, Brown (2004) showed that the mean education among persons who moved from cohabitation to marriage was 13.2 years, while the mean education for those who continued to cohabit was 11.9 years. Male earnings also were strongly linked to subsequent marriage among cohabiting couples, and male full-time employment diminished the likelihood of dissolution (Smock and Manning 1997). One policy implication is that a growing economy – one that churns out good jobs -- may ultimately be the best marriage promotion policy. A growing economy promotes marriage at the expense of cohabitation among single women, and marriage among cohabitating women at the expense of disruption.

Such a view is consistent with Becker's (1981) marriage model. The presumed "gains to marriage" from household specialization may be minimal for disadvantaged cohabiting couples; cohabiting mothers may have little choice but to work outside the home in order to make ends meet while their male partners may fall short in fulfilling the traditional provider role. Under these circumstances, the incentives to marry may be low. Carlson et al. (2004) found that only 15 percent of the disproportionately poor and minority cohabiting couples (at the time of their child's birth) in the Fragile Families Study married over the subsequent year. For them, cohabitation may be an alternative to marriage. The lack of income incentives may explain why Black cohabiting couples are less likely than more advantaged whites to marry (Waller and McLanahan 2004; Manning and Smock 1995; Sassler and McNally 2003). Black cohabiting couples are also less likely to legitimize a pregnancy by marrying (Manning 1993; Manning and Landale 1996).

The role of economic incentives also is revealed in the literature on welfare incentive effects on the family. For example, Manning and Smock (1995) showed that Black cohabiting couples that receive cash public assistance are less likely than other Blacks to marry their partners. One interpretation is that welfare may create an economic disincentive to marry among single cohabiting women; marriage jeopardizes eligibility for welfare benefits if her partner's income is counted against the grant. Cohabiting women seemingly have to choose between being married without welfare or being

<sup>&</sup>lt;sup>1</sup> Carlson et al. (2004) also showed that cohabiting mothers and father's earnings were largely unrelated to transitions to marriage. One interpretation is that economic benefits from marriage are insufficient to encourage marriage; the men available to these women are not likely to be "good providers" by traditional middle-class norms.

unmarried with welfare (Moffitt, Reville, and Winkler 1998).<sup>2</sup> As a consequence, cohabitation may provide a useful accommodation – a marriage-like arrangement with many of the benefits of marriage (e.g., companionship, economies of scale, income pooling) without the cost of giving up welfare income. For low-income women, cohabitation may be a substitute for marriage rather than a step towards marriage.

The empirical evidence is more ambiguous regarding other personal or household factors or circumstances that distinguish disadvantaged cohabiting couples that later marry from those that dissolve their relationships or continue to cohabit.<sup>3</sup> For example, a partner's children from previous relationships may represent a major disincentive to marriage, both for cohabiting men who are likely to bear the economic costs of raising them (Lichter and Graefe 2001) and for cohabiting women who must share their partner's time and income with another set of children living elsewhere (Carlson et al. 2004). Manning and Smock (1995) found, however, that pregnancy and children accelerated transitions into marriage among cohabiting couples. Pregnant cohabiting white women are also more likely to legitimize a birth by marrying than were their single counterparts (Manning 1993; Raley 2001). Graefe and Lichter (1999) similarly found that cohabiting unions were more likely to choose to marry if any coresidential children were biologically related to both partners.<sup>4</sup> At the same time, the number of children was

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<sup>&</sup>lt;sup>2</sup> Moffitt et al. (1998) found that cohabitation rates were quite high among women on AFDC (12 to 26 percent, depending on the age group and dataset). These are rates well in excess of the general population. <sup>3</sup> The consideration of relationship quality or assessments is beyond the scope of this paper (See Brown 2000). We regard relationship quality as a proximate determinant of marriage or separation, but also a

mediator of the personal and family background variables considered in this paper.

<sup>&</sup>lt;sup>4</sup> From a welfare policy perspective this may be unsurprising. In cases where the cohabiting couple has a child of their own, the incomes of both partners are used to determine welfare eligibility. It may also be the case that cohabiting couples that have children together have a level of commitment to each other that is lacking in other cohabiting couples. Cohabiting couples also may choose marriage and childbearing simultaneously, i.e., that they decide to marry (for the sake of the child) at the time they decide to have children (see Brien, Lillard, and Waite 1999).

negatively associated with transitions to marriage, a result consistent with the view that the costs of rearing and supporting children (especially many children biological unrelated to the current partner) will discourage cohabiting men from marriage. Children are likely to be a major impediment to marriage among low-income cohabiting mothers. Eligibility for public assistance may be jeopardized by marriage. Welfare income also may subsidize longer marital searches. Moreover, the additional income required of a suitable prospective husband to support a family may rise as the number of children increases. This constricts the pool of potential marriageable partners and depresses marriage rates among these women.

# **Current Study**

This paper provides a bridge between previous research on marriage patterns of economically disadvantaged single mothers (Carlson et al. 2004; Lichter et al. 2003) and new research on transitions from cohabitation to marriage (Brown 2004; Manning and Smock 1995, Sassler and McNally 2003). Cohabitation is often viewed as a step in the transition to marriage, but, as we show in this study, this may be much less true for poor cohabiting women and those on welfare. Cohabitation, however, is no substitute for traditional marriage. The large majority of cohabiting unions are of short duration.

There is little evidence that children benefit emotionally or economically in the longer term when their cohabiting parents marry (Manning and Lamb 2003), particularly given that marriages preceded by cohabitation have disproportionately high rates of dissolution (Manning, Smock, and Majamdar 2004; Graefe and Lichter 1999). Promoting or

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<sup>&</sup>lt;sup>5</sup> Other research by Xie et al. (2003) found that pregnancy and the mother's parity were statistically unrelated to marriage in a competing risk model with cohabitation. Pregnant single women, however, were more likely to cohabit rather than marry.

encouraging the entry in marriage in the absence of supporting the stability of existing marriages is no long-term solution to the "marriage problem."

Cohabiting couples, including poor couples who have borne children (i.e., the so-called "magic moment" for intervention), may be the most likely beneficiaries of government efforts to promote marriage. In this paper, we provide life tables estimates of the proportion of cohabitations that end through marriage or separation. We fit various multinomial logistic regression models of transitions from cohabitation to marriage or dissolution. Our analyses highlight the economic underpinnings of transitions from cohabitation to marriage; specifically, we focus on the effects of employment, poverty, and welfare receipt. As we describe below, the process of entry into marriage among poor cohabiting couples has several distinctive features that set them apart from non-poor cohabiting couples.

#### **Data and Methods**

#### Data

The data for this paper are drawn from the 1979-2000 waves of the National Longitudinal Survey of Youth 1979, which includes a nationally representative sample of young men and women ages 14-22 in 1979. The survey, which over-samples minorities, economically disadvantaged non-Hispanic whites, and members of the military, was conducted annually from 1979-1994 and biennially from 1996 to the present. Interviews with the oversamples of military personnel and economically-disadvantaged non-Hispanic whites, however, were discontinued after the 1990 survey. We limit our

analysis to women who experienced at least one cohabiting relationship during the study period.

Although the NLSY79 provides detailed information on marital histories, until recently the ability to track cohabitation across waves was limited (for extended discussion, see Sweeney 2002). However, recently released data allows for the examination of cohabitation across survey years, and enables us to track cohabitations over time, as well as to determine if respondents were involved in prior cohabiting and marital relationships with other individuals. Although we cannot determine the specific starting and ending dates of cohabitating relationships, we can ascertain whether a specific partner is present in the household over successive survey waves. Short-term cohabitations that do not last through the date of the survey are not captured in the data. On the positive side, the use of one-year person records has the advantage of eliminating short-term, less committed relationships that were, from the start, unlikely to lead to marriage. These short-term cohabiting unions often do not involve children, which means that they are unlikely targets of welfare reform (which is our interest in this paper)

An initial goal is to provide life table estimates of transitions from cohabiting relationships. Cohabitations may end either in marriage or in separation. We use multiple decrement life tables to estimate the likelihood of marriage or separation. Censoring occurs when a respondent drops out of the survey or when the 2000 survey is taken, the last year for which data are available.

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<sup>&</sup>lt;sup>6</sup> Unlike other datasets based on retrospective data on cohabitation (e.g., NSFG or NSFH), the NLSY includes time varying covariates on income and welfare at the beginning of each period of risk. In most retrospective surveys, time-varying covariates are typically in short supply. Such surveys typically lack employment or welfare histories.

We focus on the transitions of poor and non-poor women. Poverty is defined by comparing total family income of the female partner in the year prior to the survey to the official poverty threshold defined by the Census Bureau. As with the official poverty measure, the cohabiting partner's income is not included in our estimates of poverty. In cases with missing information, we use the poverty status from the most recent year in which data were available. We measure receipt of public assistance as a dichotomous variable coded as 1 if the respondent, spouse, or partner received AFDC, food stamps, SSI, or other welfare in the calendar year of the survey. We treat those missing on the welfare receipt variables in the same way as those cases missing on family income.

Other predictors include the respondent's family background, race, current circumstances, and the characteristics of her partner. Measures of family background include mother's education, family structure, the religion in which the respondent was raised, and the respondent's race. Mother's education is a series of dichotomous variables indicating that she has a high school diploma (or more) or a college degree, with less than a high school education serving as the reference category. Manning and Smock (1995) found that cohabiting Black women were significantly more likely to transition to marriage if their mothers had at least some college. Family structure is measured by whether the respondent lived with both parents at age 14. Cohabiting women from single-parent families were significantly less likely to marry (Manning and Smock 1995). Religion is coded into three variables, Protestant, Catholic, and those reporting no religion, with those reporting other religion coded as 0. Although we were unable to find previous research on the effect of religious affiliation on marriage among

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<sup>&</sup>lt;sup>7</sup> We are unable to provide any comparisons with and without partner income, given the high percentage of missing information in the NLSY79 (see Oppenheimer 2003).

cohabiting union, recent work indicates that conservative Protestants and Mormons are more likely than others to transition to marriage rather than cohabitation (Lehrer 2004).<sup>8</sup> Respondent's race is coded as a dichotomous variable, with African-Americans coded as 1, and 0 otherwise (i.e., non-Blacks).

Time-varying measures of the respondent's current circumstances include educational attainment, which indicates the highest level of education completed and a dichotomous measure of school enrollment as of May 1 of the survey year. Continuous measures include the number of children that the respondent has ever had and the woman's income from wages and salary in the year prior to the survey. Dichotomous variables indicate those who are unemployed and those who are out of the labor force in the week of the interview, with employed women serving as the reference category. Time-varying geographic variables include a dichotomous measure of urban residence and a series of variables indicating the region of the country in which the respondent resides at the time of the survey. We distinguish between the coastal regions (i.e., Northeast and West) and America's more socially and politically conservative heartland (i.e., South and Midwest). A series of variables also measure the time period in which the respondent first cohabited: 1985-89, 1990-94, and 1995-2000, with 1979-84 as the reference category.

Characteristics of the cohabiting male partner include age, education, and employment status. Partner's age is a continuous variable. Partner's education is a series of dichotomous variables, indicating a high school diploma (or more) or a college degree, with less than a high school education as the omitted category. Partner's employment

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<sup>&</sup>lt;sup>8</sup> Carlson et al. (2004) also found that the frequency of church attendance is associated with mothers' transitions to marriage in the Fragile Families Study.

status is a dichotomous variable indicating whether he worked at all in the prior year. We expect transitions to marriage to be associated with the partner's age, education, and employment.

Table 1 shows the means, standard deviations, and percentage distributions for the variables in the multivariate models, measured at the beginning of each episode of cohabitation. Overall, 1,305 of the women in the sample experienced one episode of cohabitation, while 937 continued to a second episode. The entire sample includes 2,242 women who experienced at least one episode of cohabitation.

(Table 1 about here)

#### Methods

We use discrete-time event history analysis to examine transitions out of cohabitation. Events are measured at a discrete point of time, in this case, at the date of the survey. This method allows for the incorporation of time-varying variables (Allison 1982, 1984). Respondents contribute person-years to the data until they experience an event, either divorce or separation, or are censored. Multinomial logistic models allow for the analysis of competing risks, with the assumption that marriage and separation are distinct events that are influenced by different underlying mechanisms (Allison 1994).

Our models assume the following functional form:

$$\log \left( \frac{P_{ijt}}{1 - P_{ijt}} \right) = \alpha_{ij} + \beta_{1j} x_{ijt1} + ... + \beta_{kj} x_{ijtk},$$

where  $P_{ijt}$  is the probability of experiencing either a marriage or a separation (j = 1 marriage; or j = 2 separation, j=0 censored) for a cohabiting woman i at time t.  $\alpha_{ij}$  is the coefficient for time t given an event. We can introduce a set of independent variables that are time-constant or time varying. Time constant variables include cohort, race,

religion, mother's educational attainment, and whether parents were together when the woman was 14. Time-varying variables include number of children a woman has, whether she is in school, educational attainment, region of residence, urban residence, employment status, whether she received welfare, income, partner's educational attainment, and whether he worked the previous year. Because a woman can have several episodes of cohabitation, we use robust standard errors to correct for the nonindependence of cohabiting episodes within each individual (White 1980).

### Results

# Life Table Estimates

Table 2 shows that most cohabiting unions are short-lived. Almost 50 percent end within one year, and 85 percent end by the fourth year after they indicate that they are cohabiting. Survival rates are lower here than in previous research. Bumpass and Sweet (1989) showed that 56 percent of first cohabiting unions were likely to end in marriage within 5 years. Manning and Smock (1995) reported that 60 percent will end in marriage within 4 years. Both studies were based on data from 1987 NSFH. Our results suggest that higher order episodes of cohabitation are even more short-lived (data not shown).

### (Table 2 about here)

Our analysis also indicates that more cohabiting unions end in disruption rather than in marriage (row 2-3, Table 2). This conclusion is based on multiple decrement survival estimates in which cohabiting couples can exit cohabitation by either marrying or splitting up (Preston, Heuveline, and Guillot 2001). By the beginning of the fourth

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<sup>&</sup>lt;sup>9</sup> In these data, our estimates suggest that most of the remaining 15 percent will end 5 years. Given current estimates from the NLSY data, only about 2 percent are expected to continue to cohabit.

year, 39.6 percent will have married and 46.5 percent will have split up.<sup>10</sup> These data are shown visually in Figure 1. These data reinforce our conclusion that most cohabiting unions do not continue indefinitely; cohabitation for most women is not a long-term alternative to marriage.

### (Figure 1 about here)

The bottom two panels in Table 2 (reproduced in Figures 2-3) provide information about the experiences of poor and nonpoor cohabiting women. These results indicate that 64 percent of poor cohabiting women survive the first year of cohabitation, and only 28 percent survive four years. The corresponding figures for nonpoor women are 44 percent and 9 percent, respectively. Survival rates for nonpoor cohabiting couples are lower than survival rates for poor couples. One implication is that cohabitation for a significant segment of poor women is more likely to be an alternative to marriage rather than a step in the process of union formation.

Indeed, only 8 percent of poor women marry by the end of year 1, compared with 31 percent of nonpoor women. Moreover, as shown in Figures 2 and 3, poor women have very similar rates of exiting from cohabitation as nonpoor women. What is different is that they have much lower transition rates to marriage. Poor cohabiting relationships last longer largely because these couples do not marry rather than because of their stability (i.e., they not dissolving).

(Figures 2 and 3 about here)

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<sup>&</sup>lt;sup>10</sup> These numbers are different from Bumpass and Sweet (1989) or Manning and Smock (1995) whose analyses are based on a national cross-sectional sample of the U.S. population aged 19 and older in 1987-88. The retrospective analyses of Bumpass and Sweet (1989: Table 4), for example, concentrate on first cohabitation cohorts between 1975 and 1984. Our analyses are based on a single birth cohort (aged 14-21 in 1979) and on cohabitation cohorts between 1979 and 2000. The higher rates of disruption in our sample seemingly reflect the different experiences of more recent birth cohorts and cohabiting unions begun after 1984. Unlike Bumpass and Sweet (1989), we also look at all cohabitation episodes rather than first cohabitations only.

# Transitions to Marriage or Dissolution

All cohabiting women. Table 3 presents the odds of marriage and dissolution (relative to continuing to cohabit) from a set of baseline competing-risk multinominal logistic regression models of marriage and separation. These models have many parallels to those of Manning and Smock (1995) and Sassler and McNally (2003), although exact replications are not possible with the NLSY. We then estimate these models for poor cohabiting women (see Tables 4).

# (Table 3 about here)

We begin with a simple model that includes duration of cohabitation and cohort (columns 1-2, Table 3). These data suggest that both marriage and separation decline as duration of the relationship increases. Long-lived cohabiting unions are much more likely to persist, a result which suggests that these unions possibly represent alternatives to marriage. The data in Table 3 also suggest that more recent cohabitation cohorts are more likely both to marry (1.378 for 1995+) and dissolve (2.769 for 1995+) than earlier cohorts. If longevity is an indicator of whether cohabitation represents an alternative to marriage, then cohabitation today seems less likely than in the past to be an alternative to marriage. Yet, these data do not indicate that cohabitation is increasingly a step toward marriage. Dissolution is significantly higher among recent cohorts than earlier cohorts.

Model 2 includes family background variables and, except for key economic variables (employment status, welfare, and wages), other indicators of cohabiting women's past (e.g., previously married) and current circumstances (e.g., in school or urban residence). These results provide several insights. First, as in previous studies

(Manning and Smock 1995; Sassler and McNally 2003), Black cohabiting women are significantly less likely than other women to transition into marriage; the odds of marriage is over two-fifths lower than for non-Blacks (.56), and dissolution is significantly higher (about 11 percent higher). Cohabiting relationships are considerable less stable among Black women.

Second, a disadvantaged family background affects union transitions. Cohabiting women who lived with both parents while growing up and whose mothers are college-educated also are more likely to marry than to continue cohabiting. Those who lived with both parents are also less likely to separate. Although religious affiliation does not affect transitions to marriage, our results nevertheless indicate that cohabiting Catholics and Protestants are significantly less likely to dissolve their cohabiting unions.

Third, women's relationship and fertility histories have mixed effects on the disposition of cohabiting unions. While the effects of past cohabitations and marriage are statistically unrelated to transitions to marriage or separation, the presence of children contributes to the longevity of cohabiting unions. That is, the number of children everborn is negatively associated with both transitions to marriage and to disruption.

Finally, although school enrollment is statistically unrelated to union transitions, poorly educated women (i.e., high school dropouts) are significantly less likely than other women to marry. College-educated women are nearly 1.8 times (odds = 1.77) more likely to marry than are high school dropouts. Yet, the cohabiting relationships of the most poorly educated women are less likely to dissolve. As with the results in Table 2, cohabitation is more likely to be an alternative to marriage for this group of women (i.e.,

educationally disadvantaged women who are also likely to be working a low-paying jobs).

Model 3 (Table 3) includes women's employment status, welfare receipt, and wages/salary. The clear result is that the receipt of welfare negatively affects transitions to marriage; the availability of welfare presumably provides an economic disincentive to marriage (presumably because it affects the size of the grant). The effect is large by most definitions. Cohabiting women who receive welfare are less than one-half as likely to transition into marriage as women who do not receive welfare (odds = .43). The receipt of welfare also appears to have an independence effect; cohabiting women who receive welfare are roughly one-third more likely to separate from their partners (odds = 1.36). This effect occurs independently of cohabiting women's employment status and earnings.

Finally, model 4 includes three characteristics of women's male partners: age, education, and employment in the past year. Although the short list of partner's characteristics available in these data cannot fully measure men's influence on the decision of cohabiting couples to marry to separate, the results are nevertheless instructive. Age and employment provide the most consistent effects. Women who cohabit with older men are less likely to marry and less likely to dissolve; older men may be more likely to view cohabitation as an alternative to marriage rather than a step in the process to marriage. For them cohabitation may also be a matter of convenience or economic necessity rather than part of the courtship process. Age heterogamy may also discourage marriage. The estimated effects of men's employment shown in Table 3 also support the conclusions of most previous research (Manning and Smock 1995; Smock and Manning 1997). That is, cohabiting women are more likely to transition into

marriage if their partners are employed. They also are significantly less likely to break up. Such results are consistent with Becker's model of marriage that emphasizes the specialization of men in market work.

In some additional analysis (not shown), we also included a measure of poverty to model 4. We found that poor cohabiting women are only about 15 percent as likely to marry as nonpoor cohabiting women (odds = .154, z = 13.97, p < .001), and 27 percent less likely to dissolve (odds = .727, z = 3.51, p < .001). These results reinforce the need to examine the union formation process of poor women, especially those who cohabit. This is an issue to which we now turn.

Cohabiting poor women. Table 4 provides estimates that parallel the set of multinominal models presented in Table 3. Many of the results for poor women in the first three models are similar to those reported for all women. For example, both marriage and dissolution decline with duration of the cohabiting union. Moreover, recent cohorts of poor cohabitors are significantly more likely to dissolve. Cohabitations begun in 1995 and later are 4.5 times more likely to dissolve than cohabitations begun between 1979 and 1984. However, unlike the positive estimates for all 1979-84 cohabiting couples (see Table 3), recent cohabiting couples are no more or less likely to marry.

### (Table 4 about here)

Model 2 includes family background variables and poor women's past and current circumstances. Poor Black women are significantly less likely to marry than poor non-Black women. The Black-non-Black difference is slightly lower among poor cohabiting women than for the entire sample of women (odds of marriage are.62 vs. .56, respectively). There are few other statistically significant relationships. Poor women

who grew up with both parents and highly educated mothers are, like all cohabiting women, significantly more likely to make transitions to marriage. Unlike all women, however, poor cohabiting women who cohabited in the past are significantly less likely to marry, a result consistent with the view that poor women are more likely than other women to be involved in serial cohabiting relationships (Lichter et al. 2003). Poor women who previously cohabited are about 45 percent less likely to marry than poor women who have not cohabited previously. It is unclear whether past cohabitations adversely affect current cohabiting relationships (e.g., due to contact with partners and children from previous relationships) or reflect unmeasured negative attitudes toward marriage or other traits of serial cohabitors is unclear.

Poor cohabiting women with children are also significantly less likely to dissolve their relationships. Unlike the results for all cohabiting women who are less likely to marry if they had children, children are not a significant deterrent to marriage among poor cohabiting women. One interpretation is that out-of-wedlock childbearing and divorces involving children are less highly stigmatized in poor communities (Graefe and Lichter 2002). Children may be a less significant factor in the decisions of potential partners to marry poor women. It may also be the case that larger shares of poor women are cohabiting with their children's biological fathers, which accelerates transitions to marriage.

Finally, poor women's employment status, welfare receipt, and wages are added to Model 3 as predictors of marriage and dissolution. These results indicate that welfare and work are statistically unrelated to transitions into marriage, but that women's earnings positively affect the likelihood of marriage. There is little evidence that welfare

discourages marriage among low-income women.<sup>11</sup> It is clear, however, that the receipt of welfare is associated with increases the likelihood of dissolution. Poor cohabiting women who receive welfare are 1.7 times more likely to dissolve than poor cohabiting women who do not receive welfare. The implication is that welfare creates an independence effect among low-income women; i.e., welfare provides an alternative source of family support that makes dissolution of unhappy cohabiting relationships possible.

Finally, we consider the effect of partners' characteristics on the likelihood that these poor women will marry or separate. Perhaps the most interesting result here is the significant negative effect of men's employment on women's transitions to marriage. Poor women with working partners are roughly 25 percent less likely to marry than poor women who are cohabiting with men without jobs. This result is inexplicable in light of economic models of marriage (e.g., Becker) and most previous empirical work. It raises obvious questions. Who are these men without jobs? And what makes them more attractive as potential marriage partners? One speculation is that nonemployed men may be most likely to desire and seek marriage as an economic livelihood strategy (see also Edin 2001). These men may be involved in the informal or underground economy, which provides more resources for disadvantaged men than formal employment (and adds to their "economic attractiveness"). Unfortunately, the NLSY data cannot speak to these issues.

Characteristics of women's cohabiting partners. The NLSY data can, however, identify the sociodemographic characteristics of men as they first enter

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<sup>&</sup>lt;sup>11</sup> This must be interpreted with caution. Most poor women receive welfare income, but we are not able to identify the dollar value.

cohabiting relationships, while also chronicling differences in the relationship outcomes (i.e., marriage or dissolution). These data are provided in Table 5. We distinguish here between poor women (columns 1-3) and nonpoor women (columns 4-6).

## (Table 5 about here)

These results support several conclusions. First, cohabiting relationships among poor women that end in dissolution are disproportionately unions with older men. These men are, on average, roughly 10 years older than the men in other poor and nonpoor cohabiting unions, regardless of outcome. Age heterogamy may place these relationships "at risk" but there are other explanations as well. Moreover, large shares of poor women who continue to cohabit or who dissolve their relationships are living with poorly educated men. Over 40 percent of the poor women who continue to cohabit are living with high school dropouts. Another 46 percent are with men who are high school graduates. For both poor and nonpoor women, however, the cohabiting unions that end in marriage are more likely than those that either persist or end in dissolution are more likely to involve men with some college or more. It is perhaps unsurprising that only 16 percent of the poor women who marry are living with men with some college or more. For nonpoor women, the corresponding figure is 45 percent.

Poor women attract less well-educated men for cohabitation and are less likely to marry their partners. The data in Table 5 also indicate that poor women are also less likely to be living with men who are employed. The transition to marriage, regardless of poverty status of the cohabiting woman, is more likely to occur if the man is working. But differences in employment across poverty status and relationship outcome are modest; the large majority of poor cohabiting women are living with men who worked

during the previous year. Nevertheless, the "marriage problem" for poor women is that they less likely to cohabit with economically attractive men, who in turn are less likely to make the transition to marriage. For poor women who marry, most have husbands who are poorly educated or have higher risks of nonemployment. For poor cohabiting women, marriage is unlikely to be an economic panacea.

### **Discussion and Conclusion**

Cohabitation has become normative step in the transition to marriage. Indeed, most persons who cohabit only cohabit with the partners they later marry (Bumpass and Sweet 1989). Although clear evidence is lacking, there is probably much less acceptance of women, especially poor women, who enter serial cohabiting relationships and who bear children with multiple partners without marrying. These are also the women who policy makers have in mind as they consider marriage promotion initiatives as part of reauthorization of the 1996 welfare reform bill. Sigle-Rushton and McLanahan (2002) found about half of new unmarried mothers were cohabiting with the baby's father. What can policy makers, community organizations, and faith-based institutions do to encourage and support marriage among disadvantaged women who are romantically involved or cohabiting with their children's fathers?

Unfortunately, previous research on the union formation process of low-income women has provided few answers to date (Lichter et al. 2003). Most previous studies of transitions to marriage among cohabiting women, however, have emphasized the economic underpinning of decisions to marry or separate, but have given much less attention to the circumstances of low income cohabiting couples whose incentives to

marry or not may be influenced by other considerations (e.g., making their children a priority or maintaining welfare eligibility). In this paper, we used panel data from the 1979 to 2000 NLSY to examine union transitions among a cohort of young women aged 14-21 in 1979. We focused in particular on the outcomes of poor cohabiting women, while emphasizing the influences of family background, personal family histories, and work and welfare.

Our results, based on more recent cohorts than those of previous studies (Bumpass and Sweet 1985; Manning and Smock 1995), suggested that that about one-half of all cohabiting unions will end within one year and 85 percent will end by the fourth year. That most cohabiting unions are short-lived is not a new finding. What is new in our data is that the majority of cohabiting unions end by dissolution of the relationship rather than by marriage. Moreover, marriage is especially unlikely among poor women, although these women have breakup rates that are similar to the rest of the population. Only 15 percent of poor cohabiting couples marry by year 4. Clearly, to better inform government efforts to promote marriage will require greater understanding of the union transitions of low-income cohabiting couples. Such was the goal of our study.

Our results indicated that economic factors, especially those of the male partner, weighed heavily in the decisions of cohabiting couples to marry. In this sense, our results largely replicated the central conclusions of most previous research on this topic (Smock and Manning 1997). Yet, the economic characteristics of poor women's cohabiting partner tell a story that is much less clear. On the one hand, a disproportion share of poor cohabiting women who married were living with employed men. Yet, in our multivariate

results (Table 4), marriage was less likely to occur if the partner was employed and his education level (and presumably his earnings potential) mattered little. We also found that the receipt of welfare by poor women was highly associated with the dissolution of cohabiting unions, but had little or no effect on marriage transitions. In our data, there is little evidence that welfare discourages entry into marriage among poor women (see also Moffitt et al. 1999). The ambiguous effects of economic characteristics on marriage in our low-income sample mirror the similarly modest economic effects reported by Carlson et al. (2004) using the Fragile Families Study. Their study highlights instead the positive effects of relationship quality (e.g., trust and fidelity) on transitions to marriage among poor women. Indeed, economic factors, including employment and earnings, may weigh less heavily in their decisions to marry if employment is unstable or earnings are erratic or low by conventional standards.

Our study has several limitations that give caution to our conclusions. The sample involves a specific cohort of young women that entered the prime marriage and family building years in the mid 1980s and early 1990s (when they were in their 20s). Whether our results can be generalized to the current period is uncertain, especially in light of the rapidly changing economic climate and welfare reform in the mid- to late-1990s. Our study also is limited by the small number of partner characteristics included in the NLSY, and by the absence of qualitative measures of the nature of the cohabiting relationships, which may be especially important dimensions of marriage formation among low-income women. This apparently is the current policy view. Much of the monies earmarked for marriage promotion in the proposed reauthorization of the welfare bill are directed toward premarital counseling, relationship skills training, and other

programs that improve relationship quality. Clearly, our study represents a modest first step in learning more about the marital decision making process among cohabiting couples, especially those poor couples who are now the targets of welfare reform.

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Table 1. Distributions of Variables at Beginning of Cohabitation, by Episode

MEANS FOR CONTINUOUS VARIABLES   Children ever born   0.71		First Enicode	Later Enjoydes	All Enicodes
Partner's Age 27.74 31.47 29.31 (7.22)  Partner's Age 27.74 31.47 29.31 (7.27)  Total income from wages and salary 8673.54 10331.25 936.96 (10988.08) (109	MEANS FOR CONTINUOUS VARIABLES	First Episode	Later Episodes	All Episodes
Partner's Age 27.74 31.47 29.31 (7.22)  Partner's Age 27.74 31.47 29.31 (7.27)  Total income from wages and salary 8673.54 10331.25 936.96 (10988.08) (109	Children ever born	0.71	1 40	1 00
(6.61) (7.47) (7.22)   Total income from wages and salary   8673.54   10331.25   9366.96 (10864.71)   PERCENTAGE DISTRIBUTIONS   (10410.26) (10988.08) (10684.71)   Liess than high school   42.07   45.78   43.62   43.62   45.78   43.62   44.80   43.62   59.77   41.30   39.83   50.80   50.17   50.15   50.17   61.15   50.17   61.15   50.17   61.15   50.17   61.15   50.17   61.15	C.ma.o., 676, 56			
(6.61) (7.47) (7.22)   Total income from wages and salary   8673.54   10331.25   9366.96     PERCENTAGE DISTRIBUTIONS   (10410.26) (10988.08) (10684.71)   (10684	Partner's Age	27.74	31.47	29.31
PERCENTAGE DISTRIBUTIONS   Family Background   Mother's Education   Less than high school   38.77   41.30   39.83   Some college   11.03   7.79   9.86   Some college   12.50   Some college   12.50   Some college   13.50   Some college   14.64   7.47   Some college   15.50   Some college   15.42	•	(6.61)	(7.47)	(7.22)
PERCENTAGE DISTRIBUTIONS   Family Background	Total income from wages and salary			
Mother's Education   Less than high school   42.07   45.78   43.62     High school   38.77   41.30   39.83     Some college   11.03   7.79   9.68     Some college   81.12   5.12   6.87     Lived with both parents at age 14   62.15   59.77   61.15     Religion in which R was raised   None   3.98   4.48   4.19     Protestant   48.97   48.99   49.97     Catholic   35.40   55.43   35.41     Other   11.55   11.10   11.42     Current Circumstances     Black   24.11   14.05   19.93     Highest grade completed     Less than high school   18.93   22.31   20.34     High school   43.22   52.93   47.28     Some college   23.22   17.29   20.74     College degree   14.64   7.47   11.64     Enrolled in school   9.50   6.62   8.30     Employment Status     Employed   64.60   65.21   64.85     Unemployed   10.34   8.00   9.37     Out of labor force   22.68   25.93   24.04     Active duty in military   2.38   0.85   1.74     In poverty   34.71   33.40   34.17     Receives welfare   22.09   25.72   23.61     Region     Northeast   21.76   14.51   18.73     Midwest   25.21   27.21   26.05     South   28.97   34.36   31.22     West   24.06   23.91   24.00     Urban residence   83.05   77.55   80.74     Partner's Characteristics     Highs school   43.67   51.59   49.98     Partner's Characteristics     High school   43.67   51.59   49.98     Partner's Characteristics     High school   43.67   51.59   49.98     Partner's Characteristics     High school   43.67   51.59   49.98     Partner worked in previous year   91.77   89.31   90.75	PERCENTAGE DISTRIBUTIONS	(10410.26)	(10988.08)	(10684.71)
Less than high school 42 07 45.78 43.02 38.37 41.30 38.33 Some college 11.03 7.79 9.88 College degree 8.12 5.12 6.87	, ,			
High school 38.77 41.30 39.83 Some college 11.03 7.79 9.68 College degree 11.02 5.12 6.87 6.87 6.81 5.12 5.12 6.87 6.87 6.81 5.12 6.87 6.87 6.81 6.81 6.81 6.81 6.81 6.81 6.81 6.81		40.07	45.70	40.00
Some college	· · · · · · · · · · · · · · · · · · ·			
College degree   8.12   5.12   6.87				
Religion in which R was raised None Protestant 48.97 Catholic 35.40 35.43 35.41 Other 11.55 11.10 11.42  Current Circumstances Black 24.11 14.05 19.93  Highest grade completed Less than high school 43.22 52.93 47.28 Some college 23.22 17.29 20.74 College degree 14.64 7.47 11.64  Enrolled in school 9.50 6.62 8.30  Employment Status Employed 64.60 65.21 0 64.85 Unemployed 10.34 Active duty in military 1.74 In poverty 34.71 Receives welfare 22.09 25.72 23.61 Region Northeast Midwest 50.01 Northeast 12.16 Northeast Midwest 24.06 23.91 Vest Highest grade completed 21.95 South 28.97 34.36 31.22 West 12.06 Sone College 33.91 24.04 College degree 14.64 7.47 11.64 8.00 9.37 8.36 8.36 8.36 8.37 8.36 8.37 8.36 8.37 8.37 8.38 8.38 8.38 8.38 8.38 8.38				
None	Lived with both parents at age 14	62.15	59.77	61.15
Protestant	Religion in which R was raised			
Catholic Other         35.40 (11.55)         35.43 (11.10)         35.41 (11.12)           Current Circumstances           Black         24.11         14.05         19.93           Highest grade completed         24.11         14.05         19.93           High school         18.93         22.31         20.34           High school         43.22         52.93         47.28           Some college         23.22         17.29         20.74           College degree         14.64         7.47         11.64           Enrolled in school         9.50         6.62         8.30           Employment Status         Employed         64.60         65.21         64.85           Unemployed         10.34         8.00         9.37           Out of labor force         22.68         25.93         24.04           Active duty in military         2.38         0.85         1.74           In poverty         34.71         33.40         34.17           Receives welfare         22.09         25.72         23.61           Region         Northeast         21.76         14.51         18.73           Midwest         25.21         27.21         26.05     <	•			
Other         11.55         11.10         11.42           Current Circumstances         Black         24.11         14.05         19.93           Highest grade completed         18.93         22.31         20.34           High school         43.22         52.93         47.28           Some college         23.22         17.29         20.74           College degree         14.64         7.47         11.64           Enrolled in school         9.50         6.62         8.30           Employment Status         64.60         65.21         64.85           Unemployed         10.34         8.00         9.37           Out of labor force         22.68         25.93         24.04           Active duty in military         2.38         0.85         1.74           In poverty         34.71         33.40         34.17           Receives welfare         22.09         25.72         23.61           Region         21.76         14.51         18.73           Midwest         25.21         27.21         26.05           South         28.97         34.36         31.22           West         24.06         23.91         24.00	Protestant			48.97
Black   24.11   14.05   19.93				
Black   24.11	Other	11.55	11.10	11.42
Highest grade completed  Less than high school		04.44	44.05	40.00
Less than high school       18.93       22.31       20.34         High school       43.22       52.93       47.28         Some college       23.22       17.29       20.74         College degree       14.64       7.47       11.64         Enrolled in school       9.50       6.62       8.30         Employment Status       Employed       64.60       65.21       64.85         Unemployed       10.34       8.00       9.37         Out of labor force       22.68       25.93       24.04         Active duty in military       2.38       0.85       1.74         In poverty       34.71       33.40       34.17         Receives welfare       22.09       25.72       23.61         Region       Northeast       21.76       14.51       18.73         Midwest       25.21       27.21       26.05         South       28.97       34.36       31.22         West       24.06       23.91       24.00         Urban residence       83.05       77.55       80.74         Partner's Characteristics       19.5       20.85       21.50         Highest grade completed by partner       21.95       20.85 </td <td>Black</td> <td>24.11</td> <td>14.05</td> <td>19.93</td>	Black	24.11	14.05	19.93
High school       43.22       52.93       47.28         Some college       23.22       17.29       20.74         College degree       14.64       7.47       11.64         Enrolled in school       9.50       6.62       8.30         Employment Status       Employed       64.60       65.21       64.85         Unemployed       10.34       8.00       9.37         Out of labor force       22.68       25.93       24.04         Active duty in military       2.38       0.85       1.74         In poverty       34.71       33.40       34.17         Receives welfare       22.09       25.72       23.61         Region       21.76       14.51       18.73         Midwest       25.21       27.21       26.05         South       28.97       34.36       31.22         West       24.06       23.91       24.00         Urban residence       83.05       77.55       80.74         Partner's Characteristics       14.95       20.85       21.50         Highest grade completed by partner       21.95       20.85       21.50         High school       43.67       51.59       46.98				
Some college       23.22       17.29       20.74         College degree       14.64       7.47       11.64         Enrolled in school       9.50       6.62       8.30         Employment Status       Semployed       64.60       65.21       64.85         Unemployed       10.34       8.00       9.37         Out of labor force       22.68       25.93       24.04         Active duty in military       2.38       0.85       1.74         In poverty       34.71       33.40       34.17         Region       South       21.76       14.51       18.73         Midwest       25.21       27.21       26.05         South       28.97       34.36       31.22         West       24.06       23.91       24.00         Urban residence       83.05       77.55       80.74         Partner's Characteristics         Highest grade completed by partner       Less than high school       21.95       20.85       21.50         High school       43.67       51.59       46.98         Some college       18.96       16.90       18.10         College degree       15.42       10.65       13.43				
College degree       14.64       7.47       11.64         Enrolled in school       9.50       6.62       8.30         Employment Status				
Employment Status				
Employed 64.60 65.21 64.85 Unemployed 10.34 8.00 9.37 Out of labor force 22.68 25.93 24.04 Active duty in military 2.38 0.85 1.74 In poverty 34.71 33.40 34.17 Receives welfare 22.09 25.72 23.61 Region Northeast 21.76 14.51 18.73 Midwest 25.21 27.21 26.05 South 28.97 34.36 31.22 West 24.06 23.91 24.00 Urban residence 83.05 77.55 80.74 Partner's Characteristics Highest grade completed by partner Less than high school 43.67 51.59 46.98 Some college 18.96 16.90 18.10 College degree 15.42 10.65 13.43 Partner worked in previous year 91.77 89.31 90.75	Enrolled in school	9.50	6.62	8.30
Employed 64.60 65.21 64.85 Unemployed 10.34 8.00 9.37 Out of labor force 22.68 25.93 24.04 Active duty in military 2.38 0.85 1.74 In poverty 34.71 33.40 34.17 Receives welfare 22.09 25.72 23.61 Region Northeast 21.76 14.51 18.73 Midwest 25.21 27.21 26.05 South 28.97 34.36 31.22 West 24.06 23.91 24.00 Urban residence 83.05 77.55 80.74 Partner's Characteristics Highest grade completed by partner Less than high school 43.67 51.59 46.98 Some college 18.96 16.90 18.10 College degree 15.42 10.65 13.43 Partner worked in previous year 91.77 89.31 90.75	Employment Status			
Unemployed       10.34       8.00       9.37         Out of labor force       22.68       25.93       24.04         Active duty in military       2.38       0.85       1.74         In poverty       34.71       33.40       34.17         Receives welfare       22.09       25.72       23.61         Region       20.05       25.21       27.21       26.05         Northeast       21.76       14.51       18.73         Midwest       25.21       27.21       26.05         South       28.97       34.36       31.22         West       24.06       23.91       24.00         Urban residence       83.05       77.55       80.74         Partner's Characteristics       40.00       4		64.60	65.21	64.85
Active duty in military 2.38 0.85 1.74  In poverty 34.71 33.40 34.17  Receives welfare 22.09 25.72 23.61  Region Northeast 21.76 14.51 18.73 Midwest 25.21 27.21 26.05 South 28.97 34.36 31.22 West 24.06 23.91 24.00  Urban residence 83.05 77.55 80.74  Partner's Characteristics  Highest grade completed by partner Less than high school 21.95 20.85 21.50 High school 43.67 51.59 46.98 Some college 18.96 16.90 18.10 College degree 15.42 10.65 13.43  Partner worked in previous year 91.77 89.31 90.75				
In poverty 34.71 33.40 34.17  Receives welfare 22.09 25.72 23.61  Region  Northeast 21.76 14.51 18.73  Midwest 25.21 27.21 26.05  South 28.97 34.36 31.22  West 24.06 23.91 24.00  Urban residence 83.05 77.55 80.74  Partner's Characteristics  Highest grade completed by partner  Less than high school 21.95 20.85 21.50  High school 43.67 51.59 46.98  Some college 18.96 16.90 18.10  College degree 15.42 10.65 13.43  Partner worked in previous year 91.77 89.31 90.75	Out of labor force	22.68	25.93	24.04
Receives welfare       22.09       25.72       23.61         Region	Active duty in military	2.38	0.85	1.74
Region         Northeast       21.76       14.51       18.73         Midwest       25.21       27.21       26.05         South       28.97       34.36       31.22         West       24.06       23.91       24.00         Urban residence       83.05       77.55       80.74         Partner's Characteristics         Highest grade completed by partner       21.95       20.85       21.50         Less than high school       21.95       20.85       21.50         High school       43.67       51.59       46.98         Some college       18.96       16.90       18.10         College degree       15.42       10.65       13.43         Partner worked in previous year       91.77       89.31       90.75         N       1305       937       2242	In poverty	34.71	33.40	34.17
Northeast       21.76       14.51       18.73         Midwest       25.21       27.21       26.05         South       28.97       34.36       31.22         West       24.06       23.91       24.00         Urban residence       83.05       77.55       80.74         Partner's Characteristics         Highest grade completed by partner       21.95       20.85       21.50         Less than high school       21.95       20.85       21.50         High school       43.67       51.59       46.98         Some college       18.96       16.90       18.10         College degree       15.42       10.65       13.43         Partner worked in previous year       91.77       89.31       90.75         N       1305       937       2242	Receives welfare	22.09	25.72	23.61
Northeast       21.76       14.51       18.73         Midwest       25.21       27.21       26.05         South       28.97       34.36       31.22         West       24.06       23.91       24.00         Urban residence       83.05       77.55       80.74         Partner's Characteristics         Highest grade completed by partner       21.95       20.85       21.50         Less than high school       21.95       20.85       21.50         High school       43.67       51.59       46.98         Some college       18.96       16.90       18.10         College degree       15.42       10.65       13.43         Partner worked in previous year       91.77       89.31       90.75         N       1305       937       2242	Region			
South West       28.97       34.36       31.22         West       24.06       23.91       24.00         Urban residence       83.05       77.55       80.74         Partner's Characteristics         Highest grade completed by partner       21.95       20.85       21.50         High school       43.67       51.59       46.98         Some college       18.96       16.90       18.10         College degree       15.42       10.65       13.43         Partner worked in previous year       91.77       89.31       90.75         N       1305       937       2242	•	21.76	14.51	18.73
West       24.06       23.91       24.00         Urban residence       83.05       77.55       80.74         Partner's Characteristics         Highest grade completed by partner       21.95       20.85       21.50         Less than high school       21.95       20.85       21.50         High school       43.67       51.59       46.98         Some college       18.96       16.90       18.10         College degree       15.42       10.65       13.43         Partner worked in previous year       91.77       89.31       90.75         N       1305       937       2242	Midwest	25.21	27.21	26.05
Urban residence       83.05       77.55       80.74         Partner's Characteristics         Highest grade completed by partner       21.95       20.85       21.50         Less than high school       43.67       51.59       46.98         Some college       18.96       16.90       18.10         College degree       15.42       10.65       13.43         Partner worked in previous year       91.77       89.31       90.75         N       1305       937       2242	South	28.97		31.22
Partner's Characteristics         Highest grade completed by partner       21.95       20.85       21.50         Less than high school       43.67       51.59       46.98         Some college       18.96       16.90       18.10         College degree       15.42       10.65       13.43         Partner worked in previous year       91.77       89.31       90.75         N       1305       937       2242	West	24.06	23.91	24.00
Highest grade completed by partner         Less than high school       21.95       20.85       21.50         High school       43.67       51.59       46.98         Some college       18.96       16.90       18.10         College degree       15.42       10.65       13.43         Partner worked in previous year       91.77       89.31       90.75         N       1305       937       2242	Urban residence	83.05	77.55	80.74
Less than high school       21.95       20.85       21.50         High school       43.67       51.59       46.98         Some college       18.96       16.90       18.10         College degree       15.42       10.65       13.43         Partner worked in previous year       91.77       89.31       90.75         N       1305       937       2242				
High school       43.67       51.59       46.98         Some college       18.96       16.90       18.10         College degree       15.42       10.65       13.43         Partner worked in previous year       91.77       89.31       90.75         N       1305       937       2242	. ,	24.2=	22.25	04 = 0
Some college       18.96       16.90       18.10         College degree       15.42       10.65       13.43         Partner worked in previous year       91.77       89.31       90.75         N       1305       937       2242	· ·			
College degree       15.42       10.65       13.43         Partner worked in previous year       91.77       89.31       90.75         N       1305       937       2242				
Partner worked in previous year 91.77 89.31 90.75  N 1305 937 2242				
N 1305 937 2242	•			
	Partner worked in previous year	91.77	89.31	90.75
	N * Standard deviations below means	1305	937	2242

<sup>\*</sup> Standard deviations below means

 Table 2. Multiple Decrement Life Table Estimates of Cohabitation Outcome by Duration, for all

Cohabitation Episodes

•	1	2	3	4	5	N
Total						
Cohabitation Surviving	0.510	0.314	0.200	0.141	0.018	2264
Cohabitation Ending	0.490	0.686	0.800	0.859	0.982	2264
Marriage	0.228	0.323	0.373	0.396	0.456	2264
Dissolution	0.262	0.364	0.428	0.465	0.526	2264
Women in Poverty						
Cohabitation Surviving	0.639	0.479	0.359	0.281	0.065	780
Cohabitation Ending	0.361	0.521	0.641	0.719	0.935	780
Marriage	0.076	0.105	0.130	0.149	0.186	780
Dissolution	0.286	0.416	0.511	0.570	0.748	780
Women not in Poverty						
Cohabitation Surviving	0.442	0.238	0.133	0.085	0.007	1484
Cohabitation Ending	0.558	0.762	0.867	0.915	0.993	1484
Marriage	0.308	0.426	0.481	0.502	0.551	1484
Dissolution	0.250	0.337	0.386	0.413	0.443	1484

Table 3. Multinomial Logit Models of Transition from Cohabitation to Marriage or Separation

	1		2		3		4	
		Separation		eparation		eparation		Separation
Duration								
One Year								
Two Years	0.673 ***	0.647 ***	0.708 ***	0.665 ***	0.713 ***	0.666 ***	0.739 ***	0.669 ***
Three Years	0.561 ***	0.654 ***	0.631 ***	0.695 ***	0.624 ***	0.705 ***	0.696 ***	0.750 **
Four Years	0.341 ***	0.551 ***	0.400 ***	0.618 ***	0.396 ***	0.627 ***	0.436 ***	0.665 ***
Five Years	0.379 ***	0.401 ***	0.480 ***	0.486 ***	0.450 ***	0.503 ***	0.602 ***	0.683 ***
Cohort								
1979-84								
1985-89	0.917	0.876	0.945	0.908	0.899	0.933	1.027	1.045
1990-94	0.888	0.875	0.973	0.930	0.918	0.956	1.213	1.190
1995+	1.378 **	2.769 ***	1.665 ***	3.431 ***	1.469 **	3.629 ***	2.195 ***	5.140 ***
FAMILY BACKGROUND								
Black			0.558 ***	1.106	0.573 ***	1.077	0.604 ***	1.123
Mother's Education								
Less Than High School								
High School or Some College			1.320 ***	1.239 ***	1.289 ***	1.250 ***	1.305 ***	1.281 ***
College			1.454 **	1.504 ***	1.456 **	1.519 ***	1.385 *	1.514 **
Lived with both parents			1.168 *	0.816 ***	1.153 *	0.824 ***	1.161 *	0.866 *
Religion in which raised								
No Religion			0.969	0.897	0.954	0.905	0.939	0.903
						0.803 **		0.801 *
Protestant			1.080	0.806 *	1.097		1.132	
Catholic			1.011	0.744 **	<u>0.992</u>	<u>0.745</u> **	0.974	0.694 ***
Other Religion								
CURRENT CIRCUMSTANCES								
Previously Married			<u>1.163</u>	<u>0.908</u>	1.084	0.940	1.106	0.966
Previously Cohabited			0.847	1.113	0.875	1.091	0.916	1.141
Children ever born			0.878 ***	0.899 ***	0.973	0.870 ***	0.980	0.866 ***
Education								
Less Than High School								
			1.292 **	0.871	1.071	0.937	1.093	0.920
High School or Some College								
College			1.770 ***	0.811	1.366 *	0.909	<u>1.408</u> *	<u>0.947</u>
In School			<u>0.870</u>	<u>1.207</u>	<u>0.861</u>	<u>1.195</u>	0.913	1.190
Urban Residence			0.942	1.335 ***	0.920	1.362 ***	0.875	1.311 ***
Region								
Other Regions Northeast and West			0.845 **	0.951	0.862 *	0.946	0.858 *	0.949
Employment Status								
Not in labor force					1.035	0.982	1.096	1.019
Unemployed					0.858	1.357 ***	0.908	1.302 **
Received Welfare					0.433 ***	1.327 ***	0.476 ***	1.335 ***
Total Wages and Salary (Logged)					1.015	0.999	1.015	1.000
						0.000		
PARTNER'S CHARACTERISTICS Partner's Age							0.952 ***	0.953 ***
Partner's Education								
Less Than High School								
							1 010 *	4 000 **
High School or Some College College							1.210 * 1.164	1.266 ** 0.903
Partner Worked in Past Year							1.474 **	0.853
Wald Chi-Squares	263.900		437.420		525.790		639.170	
Degree of Freedom	14		44		52		60	
N	5166		5093		5091		4826	

Bold coefficients indicate that the effect is significantly different across events at the p <01 level

Underlined and Italicized coefficients indicate that the effect is significantly different across events at the p <05 level

Table 4. Multinomial Logit Models of Transition from Cohabitation to Marriage or Separation for Poor Women

	1		2	2		3		4	
	Marriage	Separation	Marriage	Separation	Marriage	Separation	Marriage	Separation	
Duration									
One Year									
Two Years	0.504 **	0.618 ***	0.517 **	0.654 ***	0.518 **	0.648 ***	0.579 *	0.681 *	
Three Years	0.585 *	0.629 ***	0.544 *	0.708 *	0.541 *	0.735 *	0.567	0.782	
Four Years	0.538	0.511 ***	0.546	0.626 **	0.542	0.637 **	0.621	0.639 *	
Five Years	0.487 **	0.432 ***	0.517 **	0.565 ***	0.540 *	0.617 ***	0.697	0.777	
Cohort 1979-84									
1985-89	0.815	1.019	0.962	1.164	0.974	1.209	1.253	1.298 *	
1990-94	0.730	1.269	1.000	1.542 **	1.023	1.573 **	1.705	1.850 *	
1995+	1.755	4.560 ***	2.522 *	6.243 ***	2.683 *	7.855 ***	5.013 ***	9.476 *	
FAMILY BACKGROUND									
Black			<u>0.621</u> *	<u>1.047</u>	0.631 *	1.009	0.691	1.129	
Mother's Education									
Less Than High School			4 100	4 000 **		4 000 ***	0.000	1010 -	
High School or Some College College			<u>1.130</u> 2.795 **	1.362 ** 2.050 **	<b>0.862</b> 3.013 **	<b>1.380</b> *** 2.212 **	<u>0.862</u> 3.865 ***	<u>1.340</u> * 2.467 *	
Lived with both parents			1.443 *	0.787 **	1.459 *	0.786 **	1.600 **	0.850	
Religion in which raised									
No Religion			2.008	1.228	2.034	1.135	1.598	1.090	
Protestant			0.996	0.841	0.967	0.823	1.001	0.825	
Catholic			0.991	0.790	0.986	0.777	0.890	0.733	
Other Religion									
CURRENT CIRCUMSTANCES									
Previously Married			1.050	1.021	1.035	1.102	1.016	1.112	
Previously Cohabited			0.576 *	0.820	0.568 **	0.799	0.631	0.889	
Children ever born			<u>1.025</u>	<u>0.899</u> ***	1.046	0.824 ***	1.016	0.807 *	
Education									
Less Than High School									
High School or Some College			0.864	0.873	0.834	0.941	0.935	0.947	
College			0.925	1.817	0.969	2.489 **	1.209	2.625 *	
In School			0.431	1.070	0.407	1.054	0.516	1.022	
Urban Residence			1.092	1.368 **	1.096	1.411 **	1.020	1.383 *	
Region									
Other Regions									
Northeast and West			0.543 **	0.729 **	0.551 **	0.703 ***	0.533 **	0.722 *	
Employment Status									
Not in labor force					1.602	1.275	1.525	1.240	
Unemployed					1.709	1.711 ***	1.665	1.522 *	
Received Welfare					0.902	1.684 ***	0.893	1.659 *	
Total Wages and Salary (Logged)					1.044 *	1.015	1.035	1.011	
PARTNER'S CHARACTERISTICS Partner's Age							0.929 ***	0.962 *	
Partner's Education									
Less Than High School									
							0.894	1.124	
High School or Some College College							0.894	0.507 *	
Partner Worked in Past Year							0.786 **	0.846	
Wald Chi-Squares	102.830		177.380		192.130		195.290		
Degree of Freedom	14		44		52		60		

Bold coefficients indicate that the effect is significantly different across events at the  $p \le 01$  level Underlined and Italicized coefficients indicate that the effect is significantly different across events at the  $p \le 05$  level

Table 5. Characteristics of Women's Partners at the Beginning of Cohabitation, by Transition Type and Poverty Status

	<u>F</u>	OOR WOMEN		NON-POOR WOMEN			
	No Transition	Marriage	Separation	No Transition	Marriage	Separation	
Age	30.843	28.117	39.371	32.467	29.083	29.217	
Education							
<high school<="" td=""><td>0.434</td><td>0.300</td><td>0.366</td><td>0.144</td><td>0.149</td><td>0.136</td></high>	0.434	0.300	0.366	0.144	0.149	0.136	
High School	0.458	0.536	0.488	0.478	0.406	0.501	
Some College	0.060	0.114	0.092	0.200	0.240	0.213	
College Degree	0.048	0.050	0.054	0.178	0.205	0.150	
Employed	0.875	0.894	0.801	0.944	0.962	0.923	





