DANIEL T. LICHTER   *Cornell University*

ZHENCHAO QIAN   *The Ohio State University**

Serial Cohabitation and the Marital Life Course

Using cohort data from the National Longitudinal Survey of Youth, this paper tracks the experiences of serial cohabitors. *Results indicate that only a minority of cohabiting women (about 15% – 20%) were involved in multiple cohabitations. Serial cohabitations were overrepresented among economically disadvantaged groups, especially those with low income and education. They also were less likely than single-instance cohabiting unions to end in marriage rather than dissolve. If serial cohabitors married, divorce rates were very high — more than twice as high as for women who cohabited only with their eventual husbands. The results suggest the need to balance the government's current preoccupation with marriage promotion with greater support of "at risk" unions that marriage promotion initiatives have helped create.*

The rise of cohabitation is sometimes viewed as a threat to traditional marriage because it diminishes the symbolic significance of marriage and family life in American society (see Cherlin, 2004; Nock, 2002). Indeed, cohabitation has replaced marriage as the first union experience for the majority of young adults (Bumpass & Lu,

Bronfenbrenner Life Course Center and Department of Policy Analysis and Management, 249 MVR, Cornell University, Ithaca, NY 14853 (dtl28@cornell.edu).

*Department of Sociology, 300 Bricker Hall, 190 North Oval Mall, The Ohio State University, Columbus, OH 43210.

This article edited by David Johnson.

Key Words: cohabitation, dissolution, divorce, life course, marriage, relationships.

2000). Fertility rates among cohabiting couples remain low (Raley, 2001) and marriages preceded by cohabitation are more likely to end in divorce (Phillips & Sweeney, 2005). Yet cohabitation arguably is no threat to traditional marriage if it represents a normative step in the marriage process, where committed relationships culminate in healthy marriages that provide stable family environments for children. Recent estimates in fact indicate that 54% of first unions began with cohabitation, and 56% of those aged 19 – 44 who married had previously cohabited (Bumpass & Lu). As we argue in this paper, however, the normative sequencing of cohabitation followed by stable marriages may be changing with the apparent rise in *serial cohabitation* — women who have cohabited with more than one partner. Specifically, we examine the marital life course of cohabiting women, especially as they transition into marriage and leave unhappy marriages.

Unlike previous studies of premarital cohabitation, we identify and track, for the first time, the recent marital experiences of serial cohabitors as they move from multiple coresidential relationships into marriages. We hypothesize that a series of cohabiting relationships is a potentially significant risk factor to forming a stable marriage. We have several specific objectives. First, we provide national estimates of the percentage of serial cohabitors using data from the National Longitudinal Survey of Youth (1979 – 2000). Second, we estimate models of the transition into marriage among cohabitors. We ask whether transition rates into marriage are lower among serial cohabitors than among women who cohabit only once, and we identify the putative barriers to marriage, such as low income or the presence of

children. Third, we examine whether the marriages of cohabitors last or end in divorce. Previous studies have documented significantly higher rates of dissolution among serial cohabitors (DeMaris & McDonald, 1993; Teachman, 2003), but no studies to our knowledge have identified the specific social and economic predictors, including coresidential children, that place serial cohabitors at risk of marital dissolution. Our study addresses this research lacuna.

BACKGROUND AND THEORY

Cohabitation and Marital Outcomes: Selection or Causation?

Cohabitation is increasingly commonplace in American society. It is much less highly stigmatized (e.g., "living in sin") than in the past and occupies an "evolving place" in the American family system (Musick, 2007, p. 249). But cohabiting partners today also have less clearly defined long-term commitments to each other than in the past (Sassler, 2004). For example, Bumpass and Lu (2000) showed that the percentage of cohabiting unions ending in marriage (over a 10-year period) declined from 60% to 53% from the early 1980s to the 1990s. More recently, Lichter, Qian, and Mellott (2006) reported that marriage rates are especially low among disadvantaged and minority couples. Less than one third of poor cohabiting couples end in marriage; the large majority dissolve, which sets the stage for forming new cohabiting relationships. Serial cohabitation may thus precede a growing share of all first marriages and represent an overlooked but important risk factor for divorce.

Our working hypothesis is that women who cohabit with multiple partners are less likely to marry and, if they do marry, are less likely than other women to stay married. Whether evidence of a statistical association reflects selection or causation is unclear, however. To be sure, cohabitation in general is highly self-selective (Phillips & Sweeney, 2005; Teachman, 2003). A disproportionate share of cohabiting women are poor, low educated, and dependent on public assistance (for reviews, see Seltzer, 2000; Smock, 2000), which in turn potentially affects the likelihood of marrying and staying married. Evidence of racial and ethnic variation in cohabitation is modest, but differences in the stability of cohabiting and married unions are large, especially between Blacks and Whites (Bulanda & Brown, 2007;

Sweeney & Phillips, 2004). Some couples also may choose to cohabit rather than marry because they are "less certain of the future viability of their relationships than those who do not cohabit before marriage" (Phillips & Sweeney, p. 297). Indeed, cohabitors appear to be less committed, in general, to their partners than noncohabitors (Stanley, Whitton, & Markman, 2004). They may cycle between partners because they lack good relationship or communication skills (Cohan & Kleinbaum, 2002; Sassler, 2004). Cohabitors also may have certain chronic mental health conditions, such as depression or posttraumatic stress disorder, that negatively affect their ability to stay in relationships that lead to healthy and committed marriages (Cherlin, Burton, Hurt, & Purvin, 2005; Teitler & Reichman, 2008).

One recent study also suggests that IQ is positively associated with marital stability (Holley, Yabiku, & Benin, 2006). The substantive implication — yet to be fully tested — is that highly intelligent people may make more judicious decisions about whom they choose as marital partners. This presumably contributes to their lower divorce rates. In fact, the rapid entry of possibly mismatched partners into cohabiting unions often creates unhealthy economic and emotional entanglements that end unhappily (Glenn, 2002). Stanley, Rhoades, and Markman (2006) describe this as "sliding" into cohabitation rather than "deciding" to cohabit. Sassler (2004) and Manning and Smock (2005) report similar observations in qualitative studies of cohabiting couples in New York City and Toledo; couples often enter into cohabiting unions rapidly, without discussing marriage or their long-term plans. These relationships often take on their own momentum (i.e., "breaking up is hard to do") as they proceed inexorably toward marriage, even an unsatisfying and unstable one that ultimately ends in divorce. Inertia often characterizes these relationships (Stanley et al., 2006). Union disruption — both cohabitation and marriage — is thus "selective" of partners who enter cohabitating unions and are ill prepared for the experience.

An alternative argument to self-selection is that the experience of cohabitation itself shapes the likelihood of marrying and staying married (Axinn & Thornton, 1992; Brown, Sanchez, Nock, & Wright, 2006; Cohan & Kleinbaum, 2002). That is, cohabitation may have causal effects. For example, the day-to-day experiences of living together as an unmarried couple may exacerbate unforeseen problems with the

relationship, engender new dissatisfactions, and diminish the likelihood of marriage (Brown, 2000). McGinnis (2003) in fact found that cohabitation negatively affects the perceived costs and benefits of marriage — the experience of cohabitation itself discourages marriage. This negative shift in perceptions is consistent with other studies showing that a much higher percentage of cohabiting individuals indicate their intentions to marry than actually marry their partners (Lichter, Batson, & Brown, 2004). Recent data from the Fragile Families Study indicate that only 15% of new mothers married their cohabiting partners within 1 year of childbirth (Carlson, McLanahan, & England, 2004). A larger share — roughly one quarter — separated. Clearly, for cohabiting partners, intentions to marry can change over time or similar marital intentions are not shared by both partners (Waller & McLanahan, 2005).

Cohabitors who marry often report lower marital quality than other married couples, a fact which is consistent with elevated risks of subsequent divorce (see Dush, Cohan, & Amato, 2003). There is much less consensus about the reasons for this statistical relationship. One argument is that "living together" may feed unrealistic expectations about marriage that sometimes fail to match the reality of everyday married life. It is usually only as a married couple that they must regularly negotiate the tough decisions about spending and consumption (e.g., buying a first home), childbearing, and relationships with in-laws and friends (Glenn, 2002; Teachman, 2003). In fact, previous studies show that cohabiting couples are less likely than married couples to pool resources (e.g., have a joint bank account) or plan to have children together (DeLeire & Kalil, 2005; Kenney, 2004). The inability to make decisions through effective communication skills and mutual understanding can be a source of conflict and unhappiness. A recent study suggests that poor communication skills are a mechanism that links marriages with prior cohabitation histories to higher divorce rates (Cohan & Kleinbaum, 2002). A straightforward implication is that marriages preceded by cohabitation are more likely to end in divorce. Indeed, a large literature confirms this point (for discussion, see Phillips & Sweeney, 2005).

Serial Cohabitation, Marriage, and Divorce

The literature on cohabitation, marriage, and divorce is large (see Smock, 2000). The research literature on the relationship between *serial* cohabitation and subsequent marriage and divorce is small and much less well developed. To be sure, low marriage rates among serial cohabitors may simply reflect the aforementioned processes of social selection and social causation. Selection surely plays a large role. Transitions from one cohabiting union to another may reflect a winnowing process marked by double or triple selection on risk factors (e.g., low marriage commitment or unconventionality) that make the transition to a stable long-term marriage less and less likely over time. For reasons of selection alone, serial cohabitors may be much less likely than single-instance cohabitors to marry their partners.

From a causal standpoint, however, serial cohabitation also may fundamentally reshape marital trajectories over the life course. The emotional costs associated with "breaking up" and starting over again are presumably reduced with experience. Indeed, this argument is often used to explain the higher divorce rates of remarriages than first marriages (see Bramlett & Mosher, 2002; Teachman, 2008). With each successive breakup, it arguably becomes easier to break up again, especially if first-hand experience provides new lessons about how to be emotionally and economically self-sufficient. The psychological costs of dissolution therefore decline with each successive coresidential relationship. The likelihood of transitioning to marriage therefore is expected to decline with each successive cohabiting union.

Cohabitation also may take on a momentum of its own. That is, it may set into motion a sequence of demographic transitions — often related to nonmarital childbearing — that ultimately reduces the likelihood of getting married. For example, cohabitation and regular sexual intercourse obviously heighten the risk of unintended pregnancy and childbearing, with clear implications for marriage. Musick (2002) reported that 46% of the births to cohabiting women are unintended, compared with 61% of unmarried (noncohabiting) women and only 19% among married women. Cohabitors often are highly fatalistic about the consequences of unprotected sexual intercourse (Sassler, Miller, & Favinger, in press). Although a pregnancy itself can hasten the transition to marriage for some cohabiting couples, dissolution of the relationship is a more common outcome (Lichter & Graefe, 2001; Raley, 2001). Unintended pregnancy and childbearing decrease relationship satisfaction

and increase interpersonal conflict and violence (Pallitto, Campbell, & O'Campo, 2005). The effect is to lower transition rates to marriage, increase dissolution, and raise the risk for serial cohabitation (as separated partners reenter the "marriage market").

Serial cohabitation is also a risk factor for dissolution that carries over into marriage. For example, an early study by DeMaris and MacDonald (1993), based on data from the National Survey of Families and Households, found that the odds of marital instability among serial cohabitors (who married) was 2.05 times greater than among married couples who did not cohabit before marriage. Teachman and Polonko (1990) found that having cohabited more than once significantly increased the probability of marital disruption among men but not among women. More recently, Teachman (2003) compared disruption rates of women who cohabited with their husbands only before marriage with those who also cohabited with others. His analyses of the 1995 National Survey of Family Growth showed that 38% had cohabited before marriage; 80% of these women cohabited only with their husbands. Wives who cohabited with both their husbands and others were 1.9 times more likely to experience a marital disruption than wives who did not cohabit before marriage. These studies clearly document the fact that serial cohabitation is a risk factor for divorce. None of the three studies tested whether differences between "single-instance cohabitation" and serial cohabitation in the effect on divorce were statistically significant. And none of them addressed the question of why serial cohabitors faced higher rates of marital dissolution.

In this paper, we address this issue by focusing directly on the implications of fertility and coresident children, which we hypothesize will both undermine the stability of cohabiting unions and reshape subsequent marital trajectories. Single mothers are much less likely to marry and stay married than women who did not bear children outside of marriage (Graefe & Lichter, 2007). The end of a cohabiting relationship — and the economic exigencies this implies — may therefore set the stage for moving quickly into another cohabiting relationship with a different partner, but with a similar outcome. Any additional children that these women bear as they move from one cohabiting relationship to the next presumably further reduces their attractiveness in the marriage market. Related research from the divorce literature clearly indicates that divorced mothers are less likely to remarry than childless women (e.g., Wu & Schimmele, 2005). And second marriages are at greater risk of divorce if women bring children from a previous relationship or marriage (Teachman, 2008). We hypothesize that children — especially children from one or more previous relationships (e.g., multiple partner fertility) — pose a significant impediment to forming stable marriages.

At the same time, the uncertain economic exigencies of daily life — especially if children are involved — may trump a "good match" as a prerequisite for choosing their next partners, a situation that also adversely affects both marriage and marital stability. Recent studies show that single mothers are less likely to marry and more likely to cohabit with men who are poorly educated and unemployed and whose incomes cannot lift them out of poverty (Goldscheider & Sassler, 2006; Qian, Lichter, & Mellott, 2005). Whether the quality of single mother's partners takes a "downward spiral" as they proceed from one intimate or cohabiting relationship to the next is unclear (Graefe & Lichter, 2007). If it does, then the likelihood of getting and staying married should decline accordingly with each successive cohabiting relationship.

To sum up, women's marriage with their cohabiting partners — whether they have children together or not — is arguably of little practical significance. For them, marriage represents a progression toward greater commitment in an on-going relationship. Patterns among serial cohabitors are presumably much different. Indeed, policy concerns (e.g., healthy marriage initiatives) are perhaps best focused on those unmarried women who move from one coresidential intimate relationship to another and who often have children with more than one partner. It is the children of these women who are most likely to be "at risk" of poverty, developmental delays, and poor adult outcomes (Carlson & Furstenberg, 2006; Osborne & McLanahan, 2007). Our goal therefore is to focus new attention on the incidence and consequences of *serial* cohabitation.

METHOD

Data

The data for this paper are drawn from the 1979 – 2000 waves of the National Longitudinal Survey of Youth 1979 (NLSY79), a nationally

representative sample of young men and women ages 14 – 22 in 1979. The NLSY79 provides long, detailed marital histories. Moreover, recent data releases allow us to track cohabitation to specific partners over time and to identify respondents involved in prior cohabiting and marital relationships (for extended discussion, see Sweeney, 2002). Because we cannot, however, determine the specific starting and ending dates of cohabiting relationships, short-term cohabitations that form and break up during the interim period between survey waves are not observed. Observed short-term cohabitations nevertheless are a random representation of all short-term cohabiting unions if we assume that they are distributed evenly over the 1-year accounting period. This suggests that our estimates of effects from our multivariate analyses are not seriously biased (see Lichter et al., 2006).

These data provide some clear advantages that are simply unavailable in most other data sets. Perhaps the most important one is that the NLSY79 includes numerous *time-varying* measures of income and welfare, which are measured at the beginning of each period of risk for modeling transitions to either marriage or divorce. Other data sets based on retrospective marital histories (e.g., National Survey of Family Growth or National Survey of Families and Households) lack detailed employment or income histories and other key time-varying covariates that can be linked at the beginning of the risk period for marriage or divorce (for examples, see Graefe & Lichter, 2007; Sassler & McNally, 2003). For our purposes, this is a serious limitation because income, employment, and welfare receipt are strongly linked to patterns of union formation and stability. This shortcoming is circumvented with the panel data. Other panel data, such as the Fragile Families and Child Well-Being study or The National Longitudinal Study of Adolescent Health (Add Health), have limitations that preclude their use here. The Fragile Families Study samples new mothers, whose marital experiences can be tracked over subsequent waves. But unlike the NLSY, the sample is overrepresentative of poor, minority, and urban mothers and may (or may not) reflect the experiences of the population of unmarried cohabiting women (with and without children). Alternatively, Add Health began with a sample of adolescents in 1994. Respondents in subsequent waves are only now entering unions — mostly cohabitations — and only a small share have either entered marriages

or divorced (see Schoen, Landale, & Daniels, 2007).

Our multivariate event history analyses (discussed in detail below) center first on the disposition of cohabiting unions of different orders (first or higher order cohabiting unions), that is, whether they end in marriage or dissolve. These analyses are based on a sample of 1,795 never-married women who ever cohabited. These women contributed 6,085 person-years from age 18 to the date of first marriage or to the survey date (when they are censored). A second analytic sample — used for our analyses of divorce — includes all cohabiting women ($n = 999$) who experienced a first marriage. These analyses are based on 6,061 person-year records from year of first marriage to the date of divorce or when they are censored at the survey date.

Measures

In addition to our measure of serial cohabitation, our models include several additional covariates that take into account interindividual differences in the timing of events, family background, and current social and economic circumstances. For example, to capture time trends in marriage or divorce rates, the year when the first cohabitation started (in the analysis of marriage) and the year the first marriage started (in the analysis of divorce) are taken into account. The models also include years of cohabitation and a squared term that maps nonlinearities in the transition of cohabiting women into marriage or married women into divorce. On the basis of previous research (e.g., Lichter et al., 2006; Sassler & McNally, 2003), we expect that the odds of marriage decline with duration of the cohabiting relationship.

Our analyses also control for the confounding effects of family background, including mother's education, family structure, the religion in which the respondent was raised, and race (see Burstein, 2007; Lichter et al., 2006). Mother's education is measured as a series of dichotomous variables indicating whether she has a high school diploma, some college, or a college degree, with less than a high school education serving as the reference category. Family structure is measured by whether the respondent lived with both parents at age 14. Cohabiting women from single parent families are significantly less likely to marry (Lichter et al.). Protestants serve as the reference group for the religion variable, with Catholics, those reporting another religion, and those

reporting no religion serving as the three predictors. Although previous research on the effect of religious affiliation on marriage among cohabiting unions is limited, related work indicates that unmarried conservative Protestants and Mormons are most likely to transition into marriage rather than cohabitation (Carlson et al., 2004; Lehrer, 2004; Wilcox & Wolfinger, 2007). Race and ethnicity are coded with two dummy variables, Black and Latina, with non-Hispanic White women serving as the reference category. In general, previous research shows that economically disadvantaged couples are less likely to transition into marriage and more likely to divorce than middle-class, White couples (Brown et al., 2006; Lichter et al.).

Our models of first marriage and divorce also include several other control variables that represent current social and economic circumstances. Educational attainment is measured by the highest level of education completed and a dichotomous measure of school enrollment as of May 1 of the survey year. Women's income from wages and salary (in 2000 dollars) is a time-varying covariate that is measured in the year prior to the year "at risk" of first marriage (or, among married women, in the year proceeding divorce). Dichotomous variables identify 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. Our models also include a time-varying measure of welfare receipt (lagged by 1 year). Welfare income may provide, *ceteris paribus,* both a disincentive for marriage and an incentive for divorce (Burstein, 2007).

Finally, we measure nonmarital childbearing as the number of children born prior to first marriage. We also include a measure of the total number of coresidential children at the end of the period of risk to capture subsequent fertility. Previous research shows that fertility among cohabitors is associated with more rapid transitions to marriage (see Musick, 2007). Recent research also shows that marriage among single mothers and the likelihood of subsequent divorce are affected by the presence of coresidential male children (for review, see Raley & Bianchi, 2006). These are key variables that inform our theoretical perspective. Specifically, if low rates of marriage among serial cohabitors result from multiple births (and perhaps multiple fathers) across cohabitation order, then controlling for fertility will reduce or eliminate any effects of serial cohabitation on both marriage and divorce (Guzzo & Furstenberg, 2007).

Because of redundant data collection over waves of the NLSY panel, our pooled file does not suffer from significant item nonresponse or missing information. Any missing data are replaced with relevant information for a given year or other years for a particular individual. For example, missing values for time varying variables at time t are substituted with the valid values at time $t - 1$. In some instances, such as missing data on mother's education, we added an additional dummy variable that identified these cases in the multivariate analysis (but do not report the estimates in the tables). A similar procedure was adopted to account for the few cases with missing data on religion, employment status, and receiving welfare.

Analytic Approach

An initial goal is to provide life table estimates of transitions out of cohabiting unions. Cohabitation may end either in marriage or dissolution. We use multiple decrement life tables to estimate the likelihood of marriage or separation (Preston, Heuveline, & Guillot, 2001). This method is appropriate when more than one mode of exit is possible (transitions to marriage or dissolution from cohabitation). Censoring occurs when a respondent drops out of the survey or when the 2000 survey is taken.

We next use discrete-time event history analysis to examine transitions to first marriage among cohabitors and marital disruption (of first marriages) among cohabitors (including serial cohabitors). For our purposes, marriage or divorce are measured at a discrete point in time, in this case, the survey year. This method allows for the incorporation of time-varying variables (Allison, 1982, 1984).

Binomial logistic models are used to predict first marriage (or transitions from marriage to divorce) among the cohabitors. Our models assume the following functional form:

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

where P_{ijt} is the probability of experiencing a marriage (or dissolution) ($j = 1$ marriage; $j = 0$ censored) for a woman i at time t. α_{tj} is the coefficient for time t given an event. We introduce a set of independent variables that are time constant or time varying (defined earlier). Time

constant variables include the number of prior cohabitations, race, religion, mother's educational attainment, and whether parents were together when the woman was 14. Time-varying variables include the number and sex of the woman's children, whether the woman is in school and her educational attainment, the woman's employment, welfare status, and income. For ease of explanation, we convert our logistic regression estimates into odds ratios (DeMaris, 1995).

RESULTS

Estimates of Serial Cohabitation

We begin in Table 1 by providing the percentage distribution for cohabitation order, that is, the percentage of women with 0, 1, 2, or 3 or more cohabitations. For this cohort of women (aged 14 – 22 in 1979), the large majority (79.3%) did not cohabit before they first married. For women who cohabited and then married, the large majority (86.5%, 864 × 100/(864 + 113 + 22)) cohabited only once.

For this cohort, serial cohabitation represents a very small share of all cohabitations before first marriage — only 13.5% of all cohabitations that preceded marriage (i.e., 2.8 of the 20.7%) were of order 2 or higher, and only a small share of these higher order cohabitations were 3 or more. Even when we examine all cohabitations in our data set, excluding cohabitations among women following the breakup of the first marriage, the share of serial cohabitors (among all cohabitors) rises only slightly to 17.7% (i.e., 14.2% with 2 cohabitations and 3.5% with 3 or more). Most women in this cohort entered first marriage in the 1980s and early 1990s, at a time when rates

of cohabitation and perhaps serial cohabitation were lower than they are today.

A Sociodemographic Profile of Serial Cohabitors

What distinguishes serial cohabitors from other women? Table 2 presents a social and demographic profile of all cohabitors, including serial cohabitors, and provides comparative information for women who married without prior cohabitation experience. It provides variable means, measured at the beginning of the first episode of cohabitation, and reports overall tests of statistical significance across cohabitation order (last column, Table 2) and pairwise tests between single-instance cohabitation and other cohabitation orders (as well as noncohabitation). The results indicate that the percentage of minority women were overrepresented among serial cohabitors. Serial cohabitors also first started cohabiting 1 – 2 years earlier in age (as were their partners) than those who cohabited only once. Perhaps surprisingly, the mothers of single-instance cohabitors and serial cohabitors were slightly more likely than noncohabitors to be college educated or to have attended college. Cohabitors in general were much less likely to have lived with both parents at age 14 (e.g., 58% for second order cohabitors and 64% for first order cohabitors), a fact which reinforces evidence of intergenerational family patterns (Sassler, Cunningham, & Lichter, in press). Indeed, 72% of noncohabitors lived with both parents at age 14 and married at younger ages than cohabitors.

These results also indicate that economically disadvantaged women are overrepresented among serial cohabitors — a fact that is relevant to marriage promotion initiatives. Serial cohabitors tend to have significantly lower incomes than single-instance cohabitors, higher rates of poverty, and rely more than other cohabitors on welfare income. For example, the mean income of women with three or more cohabitations was $7,925 when they first cohabited, compared with $13,567 for women who only cohabited once. Over one half of the serial cohabitors were poor. Not surprisingly, serial cohabitation was relatively more common among high school dropouts. Over one quarter of serial cohabitors (2 or 3 cohabitations) were high school dropouts, a finding that reinforces the commonplace perception that serial cohabitation is a response or adaptation to economic hardship (Edin & Kefalas, 2005).

Table 1. *Percentage Distributions of Cohabitation Order Leading to First Marriage and Cohabitation Frequency Prior to First Marriage*

Cohabitation Frequency	Before First Marriage (%)	All Cohabitations (%)
0	79.3 (3833)	—
1	17.9 (864)	82.3 (1478)
2	2.3 (113)	14.2 (254)
3+	0.5 (22)	3.5 (63)
N	4,832	1,795

Table 2. *Distributions of Variables at the Beginning of the First Cohabitation Episode by Cohabitation Frequency*

	No Cohabitation (1)		One Cohabitation (2)		Two Cohabitations (3)		Three or More Cohabitations (4)		ANOVA or Chi-Squared Tests (5)
Means and standard deviations for continuous variables									
Age at union	22.4***	(3.91)	24.03	(4.66)	22.5***	(3.09)	21.28***	(2.44)	49.70***
Children ever born	0.46***	(0.77)	0.58	(1.05)	0.55	(.91)	0.44	(.81)	6.35***
Total income from wages and salary (US$)[a]	10,897***	(12,871)	13,567	(14,515)	9,292***	(14,433)	7,925***	(7,923)	14.53***
Dollar amount of welfare received[a]	404***	(1,778)	1,040	(2,806)	1,286	(3,077)	1,292	(2,979)	34.63***
Percentage distributions									
Family background									
Race	***								28.83***
White	63.53		63.40		57.84		62.00		
Black	19.16		24.34		25.41		18.00		
Hispanic	17.31		12.26		16.76		20.00		
Mother's education	**								16.78*
Less than high school	45.01		42.03		41.08		38.00		
High school	40.21		38.79		39.46		44.00		
Some college	8.21		10.42		12.43		10.00		
College degree	6.56		8.76		7.03		8.00		
Lived with both parents at age 14	72.02***		63.66		57.84		46.00**		53.93***
Religion in which R was raised	**								25.23**
None	2.95		3.77		4.32		8.00		
Protestant	49.64		49.47		48.65		42.00		
Catholic	35.78		34.85		35.68		46.00		
Other	11.63		11.91		11.35		4.00		
Current circumstances									
Highest grade completed	***						***		31.32***
Less than high school	18.77		20.05		25.95		24.00		
High school	46.89		41.68		40.00		64.00		
Some college	20.01		24.17		21.08		10.00		
College degree	14.33		14.10		12.97		2.00		
Enrolled in school	8.79***		11.65		11.89		6.00		10.14**
At least one male child in household	17.75		18.21		15.68		10.00		2.77
Employment status	***								77.48***

Table 2. *Continued*

	No Cohabitation (1)	One Cohabitation (2)	Two Cohabitations (3)	Three or More Cohabitations (4)	ANOVA or Chi-Squared Tests (5)
Employed	55.6	64.62	55.68	60.00	
Unemployed	10.12	11.03	13.51	10.00	
Out of labor force	26.87	22.50	29.19	30.00	
Active duty in military	7.41	1.84	1.62	0.00	
In poverty	13.65***	38.53	58.7***	54.00**	509.99***
Receives welfare	10.27***	20.18	25.00	22.00	101.42***
N	3,628	1,142	185	50	

Note: Information for women with no cohabitation was taken at the beginning of their first marriage.

[a]Adjusted for inflation.

*p < .1. **p < .05. ***p < .01.

Life Table Estimates of Union Transitions Among Cohabitors

We next turn to the question of how cohabiting unions end — either marriage or dissolution. That is, are higher order cohabitations less likely to end in marriage, as we have hypothesized? Table 3 provides cumulative survival rates for cohabitors, by cohabitation order, over 5-year duration periods. These data do not lend themselves to simple interpretations. Any differences in outcomes across episodes of cohabitation are either very small or they vary unpredictably from one order to the next. The main commonalities, however, are straightforward. About one half of first- and second-order cohabitations end in marriage or dissolution in the first year. The share that end is somewhat higher among third or higher order cohabitations (i.e., 67%), but this estimate is based on a small number of cohabitations (55). The results also indicate that very small fractions of cohabitations last more than 5 years (somewhere between 10% and 15%).

The main difference between single cohabitations and serial cohabitations (especially over 2) is how they end. For the first two episodes of cohabitation, cohabiting unions are roughly equally likely to end by marriage or dissolution. Among first cohabitations, this roughly 50-50 split is evident for all durations. But, among second order cohabitations, couples were more likely to dissolve than marry after 3 years. For example, 42.6% of these cohabitations ended in dissolution after 2 years of cohabitation, whereas 37.1% ended in marriage. For persons with 3 or more cohabitations the likelihood of dissolution was even higher. Over 50% ended in dissolution after 1 year, whereas only 16% married. After 5 years, nearly two thirds had dissolved (66%), whereas only 23% transitioned to marriage. Clearly, the more often women cohabit the less likely the relationship will end in marriage. This finding is not especially surprising if successive episodes of cohabitation increasingly "select" on people who are prone to dissolution (i.e., less commitment to marriage, emotional problems, abusive, substance abusers).

Modeling Transitions From Cohabitation to Marriage

An important next step is to "explain" *why* serial cohabitors have lower transitions to marriage, a question that has not been addressed in

previous research on transitions from cohabitation to marriage (e.g., Sassler & McNally, 2003). The results of our discrete time event history models of first marriage are reported in Table 4. Model 1 is limited to strictly exogenous family background variables. These baseline results indicate that the odds of marriage among Black and Hispanic cohabitors are only 53% or 50% as large as they are for White cohabitors. More significantly, racial and ethnic differences do not reflect differences in family socioeconomic background, which nevertheless is strongly associated with transitions from cohabitation to marriage. For example, the odds of marriage among cohabiting adult children of mothers with a college degree are 64% greater than for cohabiting women whose mothers were high school dropouts. Moreover, cohabiting women who lived with both parents at age 14 were more likely to convert their coresidential relationships into marriage (*OR* = 1.26). Finally, cohabitors raised as Catholics were significantly more likely to marry their partners.

Model 2 in Table 4 includes the number of the cohabitations, along with the duration variables (which are required in these discrete time models) and year first cohabitation started. Here we compare women who cohabited only once with those who cohabited more than once. The odds of marriage are 23% lower among serial cohabitators than single-order cohabitors; these effects are sig-

nificant at the .05 level. The net effects of serial cohabitation are reported in Model 3 in Table 4, which control for the effects of exogenous family background variables. These results confirm the bivariate results reported in Table 3: Serial cohabitors are less likely to transition into marriage — about 18% less likely in a given year.

A commonly held assumption drawn from the literature on single mothers is that they often move from one coresidential relationship to another as an adaptation to economic hardship, while at the same time reducing the likelihood of marriage if they have more than one child or multiple partners. We cannot provide direct empirical evidence on this hypothesis; we lack the requisite data. But we can determine whether the low marriage rates of serially cohabiting women reflect higher rates of past fertility among serial cohabitors. The results are presented in Model 4 (Table 4). Contrary to our expectations, they indicate that nonmarital fertility plays little if any role in accounting for the lower marriage rates among serial cohabitors than among women who cohabit with their husbands only. Even when past fertility is controlled, serial cohabitors remain 18% less likely than single-instance cohabitors to transition into marriage.

Interestingly, current social and economic circumstances (Model 5, Table 4) also are not responsible for the strong negative association between serial cohabitation and marital transitions. Net of

Table 3. *Multiple Decrement Life Table Estimates of Cohabitation Outcome by Duration, for All Cohabitation Episodes*

	Years Since Cohabitation					
	0	1	2	3	4	*N*
First						
Cohabitation surviving	0.508	0.316	0.209	0.144	0.098	1,380
Cohabitation ending	0.492	0.684	0.791	0.856	0.902	
Marriage	0.252	0.349	0.400	0.431	0.454	
Dissolution	0.241	0.335	0.392	0.426	0.448	
Second						
Cohabitation surviving	0.516	0.338	0.204	0.153	0.153	236
Cohabitation ending	0.484	0.662	0.796	0.847	0.847	
Marriage	0.251	0.320	0.371	0.384	0.384	
Dissolution	0.233	0.342	0.426	0.463	0.463	
Third or more						
Cohabitation surviving	0.327	0.196	0.112	0.112	0.112	55
Cohabitation ending	0.673	0.804	0.888	0.888	0.888	
Marriage	0.163	0.229	0.229	0.229	0.229	
Dissolution	0.510	0.576	0.659	0.659	0.659	

Table 4. *Odds Ratios of Discrete Time Logit Models Predicting First Marriage Among Cohabitors*

	Model 1	Model 2	Model 3	Model 4	Model 5
Years since cohabitation	2.21***	2.08***	2.20***	2.22***	2.19***
Years since cohabitation squared	0.93***	0.93***	0.93***	0.93***	0.93***
Year first cohabitation started	1.00	0.99	1.00	1.00	0.98
Family background					
Race					
White					
Black	0.53***		0.53***	0.54***	0.52***
Hispanic	0.50***		0.51***	0.52***	0.54***
Mother's education					
Less than high school					
High school or some college	1.39***		1.40***	1.38***	1.26***
College	1.64***		1.65***	1.63***	1.40**
Lived with both parents	1.26**		1.25**	1.25**	1.14
Religion in which raised					
Protestant					
Catholic	1.20*		1.20*	1.19*	1.13
Other religion	0.95		0.95	0.95	0.92
No religion	0.90		0.90	0.90	0.88
Number of cohabitations prior to first marriage					
1					
2 or more		0.77**	0.82*	0.82*	0.80**
Current circumstances					
Number of children					
No child					
One child				1.21	1.50***
Two or more				0.94	1.45**
Boy in the family					
No					
Yes				0.90	0.85
Education					
Less than high school					
High school or some college					1.30**
College					1.60**
In school					
No					
Yes					0.84
Employment status					
Employed					
Not in labor force					1.04
Unemployed					1.01
Received welfare in previous year					
No					
Yes					0.61***
Logged wages and salary (2000 dollars)					1.02*
Wald chi-square	216.44	136.00	219.00	223.11	254.45
N	6085	6085	6085	6085	6085

Note: Cohabitation duration and its square are controlled. Robust standard errors.

*p ≤ .10. **p ≤ .05. ***p ≤ .01.

these economic factors, serial cohabitors are in fact 20% less likely to transition into marriage than are non-serial cohabitors. Women with one child are roughly 50% more likely to marry than women with no children (also see Raley 2001). This may simply reflect the fact that cohabiting mothers are more likely to "legitimate" the birth of a child by marrying the biological father of the child. Counterevidence to this simple argument is contained in the fact that single cohabiting mothers with two or more children are also more likely to marry than their childless counterparts. Children do not seem to be an impediment to marriage among cohabiting women. In fact, it may create an incentive to marry.

Finally, in some additional analyses (not shown), we included three interaction terms between serial cohabitation and number of children (0, 1, or 2 or more). The hypothesis here is straightforward: Any negative effects of children on marriage will be greatest for women with multiple cohabiting partners, especially if we assume (in the absence of direct data) that her children have different fathers. None of these interaction effects, however, were statistically significant at conventional levels.

Modeling Transitions From Marriage to Divorce

Are serial cohabitors who marry more likely to divorce than women who cohabit only once before they marry? If so, then it is not enough to promote marriage without also helping fragile marriages survive (e.g., postmarital rather than premarital counseling or relationship skills courses). Indeed, previous studies have shown that cohabitors have worse marital outcomes and higher divorce rates than women who do not cohabit before marriage (Brown et al., 2006; DeMaris & Rao, 1992; Dush et al., 2003). Teachman's (2003) analyses suggest that the correlation between premarital cohabitation and divorce is due largely if not entirely to the high divorce rates among serial cohabitors. To date, however, we have only a limited understanding of the reasons for the higher divorce rates of these women.

To address this question, the analysis in Table 5 attempts to "explain away" the positive association between serial cohabitation and divorce by considering, sequentially, a series of covariates linked to both cohabitation and divorce. Model 1, for example, includes various family background variables. As expected, the results show that the factors that are associated negatively with marriage tend to be positively associated with divorce (e.g., low family socioeconomic status or two-parent family backgrounds). For example, married women who had cohabited have a 21% lower likelihood of divorce if they lived with both parents while growing up than if they did not.

Model 2 includes the number of cohabitations prior to marriage, along with the duration variables and the year of first marriage. These estimates indicate that divorce rates are high for serial cohabiting women who marry. For women who cohabited two or more times, the odds of divorce were 141% higher than for women who cohabited only with their first marriage partners. Interestingly, the risk of divorce is also greater among women who did not cohabit with their husbands but with someone else prior to marriage ($OR = 1.53$).

Model 3 combines the family background variables along with cohabitation order. These results clearly reveal that the effects of serial cohabitation are not due to selection alone, at least with respect to these family background variables. In fact, the size of the estimates for serial cohabitation change very little between models 2 and 3 ($OR = 2.34$ vs. 2.41). The statistically significant effect of serial cohabitation on divorce also occurs independently of past fertility (Model 4) and other current social and economic circumstances (Model 5). These analyses uncover serial cohabitation as a potentially important (but often ignored) risk factor for divorce. At the same time, our analyses fail to fully "explain" why serial cohabitation undermines marital stability. Neither selection on family background characteristics nor the other well-documented risk factors, such as low socioeconomic status or past fertility with different partners, can account for the large effect of serial cohabitation on divorce.

DISCUSSION AND CONCLUSION

This study has focused for the first time on the marital life course of cohabitors, including serial cohabitors. Unlike most previous studies, we track the transitions of cohabiting women into marriages, while documenting their success — some last, whereas others end in divorce. Previous studies sometimes view the rise in cohabitation as a threat to traditional marriage, especially as

Table 5. *Odds Ratios of Discrete Time Logit Models Prediciitng Divorce for First Marriage for Women With Prior Cohabitation Experience*

	Model 1	Model 2	Model 3	Model 4	Model 5
Years since marriage	1.10**	1.03	1.04	1.05	1.10
Years since marriage squared	0.99***	0.99	0.99	0.99*	0.99**
Year marriage started	0.97**	0.95***	0.96***	0.96***	0.97**
Family background					
Race					
White					
Black	0.85		0.87	0.75**	0.75**
Hispanic	1.08		1.08	1.01	0.99
Mother's education					
Less than high school					
High school or some college	0.80**		0.80**	0.88	0.91
College	0.71**		0.72*	0.83	0.90
Lived with both parents	0.79**		0.80**	0.85*	0.87
Religion in which raised					
Protestant					
Catholic	0.75***		0.75**	0.78**	0.79**
Other religion	0.88		0.89	0.91	0.96
No religion	1.24		1.26	1.20	1.22
Number of cohabitations prior to first marriage					
1, married to this partner					
1, married to another partner		1.53**	1.50**	1.49**	1.48**
2 or more		2.41***	2.34***	2.33***	2.30***
Number of children prior to first marriage					
0					
1				1.22*	1.32**
2 or more				1.63***	2.07***
Current circumstances					
Number of children					0.88*
Boy in the family					
No					
Yes					0.98
Education					
Less than high school					
High school or some college					0.75**
College					0.57***
In school					
No					
Yes					1.32
Employment status					
Employed					
Not in labor force					1.08
Unemployed					1.06
Received welfare in previous year					
No					
Yes					0.87
Logged wages and salary (2000 dollars)					1.01
Wald chi-square	43.17	31.610	58.79	74.92	96.55
N	6,061	6,061	6,061	6,061	6,061

*p ≤ .10. **p ≤ .05. ***p ≤ .01.

a context for childbearing and childrearing (see Cherlin, 2004; Nock, 2002). But cohabitation is no threat if it represents a normative step to a lasting marriage. Indeed, the marital life course of women who cohabited only with men they married is much different from women with histories of short-term coresidential relationships. As we have argued here, serial cohabitation — cycling from one relationship to another — presents a more serious challenge to a stable marriage. Our primary goal here was to examine this working hypothesis by providing baseline estimates of serial cohabitation and its aftermath. Specifically, we highlighted for the first time the demographic and economic characteristics of serial cohabiting women and evaluated their marital life course trajectories, that is, whether they ultimately marry and stay married.

Our results indicated that most women in our sample — women aged 35 to 43 in 2000 — did not cohabit prior to marriage and that less than 20% of those who cohabited were involved in multiple cohabitations. The large majority of cohabiting women cohabited with their husbands only. Serial cohabitors were overrepresented among economically disadvantaged groups, however, especially the poor or those on welfare. This fact alone makes this group of special interest to policymakers. Higher order cohabitations were significantly less likely to transition into marriage, especially if the women cohabited three or more times (see Table 3). Only about one quarter to one third of these cohabiting unions successfully transitioned to marriage. Even when conventional social, economic, and demographic variables are controlled in binomial logistic models, serial cohabitation placed women at much greater risk of remaining single.

The empirical results also provided evidence that serial cohabitation was partly selective of couples with social and economic background characteristics that placed them ''at risk'' of dissolution, either while cohabiting or after getting married. Yet our working assumption that the higher dissolution rates among serial cohabitors reflected the exigencies and stressors associated with fertility (including multiple partner fertility) received little empirical support. For serial cohabitors who married, the odds of divorce were nevertheless more than double those of women who cohabited only with their future husbands, even when controlling for past fertility and other socioeconomic characteristics. These large differences suggest the need to identify additional

sources — both selection and causative factors — that account for them.

Indeed, our baseline analyses provide several substantive and policy implications for future research. First, they suggest the need to distinguish between cohabiting unions that represent a step toward marriage from other couples who have no specific plans for marriage or who represent an unstable semipermanent alternative to marriage. To be sure, such discussions have already begun with recent attempts to classify different types of cohabiting unions (see Brown 2000, 2004; McGinnis, 2003). But serial cohabitation is not ordinarily included in these classification schemes. The analytic problem, of course, is that static classification schemes may misrepresent the fluidity of marital aspirations. At least initially, most cohabiting couples have no intention of marrying; marriage is often not even discussed (Manning & Smock, 2005; Sassler, 2004). Marital aspirations may only emerge as commitment and emotional dependency grow. Reed's (2006) recent qualitative study reported that most unmarried parents began cohabiting as a practical response to a pregnancy, that is, cohabitation allowed them to coparent and share expenses. The desire for marriage — if it came at all — came much later. As our empirical results suggest, understanding the myriad motivations of cohabitors may be more important than ever, especially if cyclical serial cohabiting couples with children have increased among recent cohorts as a percentage of all cohabitations.

Second, from a policy standpoint, our results suggest that promoting marriage among serial cohabitors — especially disadvantaged cohabiting women — may be much more difficult than previously thought. The relatively high rates of marriage among all cohabiting women may be misleading. Indeed, as we observed here, serial cohabitors have significantly lower rates of marriage and higher disruption rates than cohabitors who marry their partners. The implication is that they face serious economic and family constraints to marriage that simply do not exist among childless cohabitors who cohabit only with men they marry. For example, serial cohabitation may reflect demographic shortages of men who are good providers or companions (e.g., men with good jobs, who are faithful, or who are drug free). Women may cycle between relationships because their partners are not good ''marriage material.'' If so, serial cohabitors may be less responsive to specific policy initiatives (e.g.,

marriage education) that seemingly treat all unmarried couples alike. Our study does not include measures of marriage market conditions, but previous studies, especially of the low income population, suggest that shortages of marriageable men affect marriage prospects (Harknett & McLanahan, 2005). Whether demographic shortages of men affect serial cohabitation is less clear.

Third, our results indicate that economically disadvantaged women are overrepresented among serial cohabitors (Table 2) and that marital dissolution rates are high among serial cohabitors who marry. Taken together, our empirical results imply that recent marriage promotion initiatives should give much greater attention to supporting poor fragile families with children if and when they marry (see Acs, 2007). High dissolution rates imply that the quality of these marital relationships is often low. Clearly, our results speak only indirectly to questions of low marital quality; we can infer the quality of relationships only on the basis of whether marriages last. Debates over the language contained in the recent reauthorizing legislation of the landmark welfare reform bill (Personal Responsibility and Work Opportunity Reconciliation Act of 1996) centered, in part, on the appropriateness of supporting "healthy" marriages rather than marriages per se. Our results, especially those on the disposition of serial cohabiting unions, suggest the need to learn much more about the kinds of selection and causative factors (e.g., economic stress, infidelity, abuse, lack of communication) that place serial cohabitors at greater risk of disruption (Moore et al., 2004). We have neither identified nor evaluated all of the potential risk factors that differentiate serial cohabitors from other cohabiting women.

In the final analysis, our conceptual framework and empirical results provide a baseline for additional studies on the putative causes and consequences of serial cohabitation. Our data are based on the marital and cohabitation histories of women who were 35 – 43 years of age in 2000. Partnering and parenting are much different today than in the past, especially with the continuing retreat from early marriage and the recent rise in nonmarital fertility ratios. Young people today grew up during a period of family upheaval and rising divorce, high child poverty rates (in the 1980s), and diminished stigma associated with early premarital sexuality, multiple sexual partners, and impermanent cohabiting relationships before marriage. Moreover, our analyses have necessarily focused on women. We largely ignored the characteristics of their partners/husbands or aspects of the relationship itself (communication skills) that might reduce the likelihood of getting and staying married (Cohan & Kleinbaum, 2002). New retrospective data on men from the 2002 National Survey of Family Growth indicate that low-income men are most likely to marry or cohabit with single mothers, which is a risk factor for dissolution while setting the stage for multiple cohabitations (Lichter & Graefe, 2007). Obviously, marriage represents a two-side matching problem that involves women and men. Finally, our discussion and interpretation of results have been framed in a policy context that increasingly assumes that marriage is better for women than remaining single (for discussion, see Harris & Parisi, 2005; Williams, Sassler, & Nicholson, 2008). Obviously, promoting marriage between partners who would not otherwise marry, or endeavoring to keep chronically dissatisfied couples together, is no marker of program success if these relationships do not last.

NOTE

REFERENCES

Acs, G. (2007). Can we promote child well-being by promoting marriage? *Journal of Marriage and Family, 69*, 1326 – 1344.

Allison, P. D. (1982). Discrete-time methods for the analysis of event histories. In S. Leinhart (Ed.), *Sociological methodology 1982* (pp. 61 – 98). San Francisco: Jossey-Bass.

Allison, P. D. (1984). *Event history analysis*. Newbury Park, CA: Sage Publications.

Axinn, W. G., & Thornton, A. (1992). The relationship between cohabitation and divorce: Selectivity or causal influence. *Demography, 29*, 357 – 374.

Bramlett, M., & Mosher, W. (2002). Cohabitation, marriage, divorce, and remarriage in the United States. *Vital Health Statistics, Series 23, No. 22*. Hyattsville, MD: National Center for Health Statistics.

Brown, S. L. (2000). Union transitions among cohabitors: The significance of relationship assessments

and expectations. *Journal of Marriage and the Family*, *62*, 833 – 846.

Brown, S. L. (2004). Moving from cohabitation to marriage: Effects on relationship quality. *Social Science Research*, *33*, 1 – 19.

Brown S. L., Sanchez, L. A., Nock S. L., & Wright, J. D. (2006). Links between premarital cohabitation and subsequent marital quality, stability, and divorce: A comparison of covenant versus standard marriages. *Social Science Research*, *35*, 454 – 470.

Bulanda, J. B., & Brown, S. L. (2007). Race-ethnic differences in marital quality and divorce. *Social Science Research*, *36*, 945 – 967.

Bumpass, L., & Lu, H.-H. (2000). Trends in cohabitation and implications for children's family contexts in the United States. *Population Studies*, *54*, 29 – 41.

Burstein, N. R. (2007). Economic influences on marriage and divorce. *Journal of Policy Analysis and Management*, *26*, 387 – 429.

Carlson, M., McLanahan, S., & England, P. (2004). Union formation in fragile families. *Demography*, *41*, 237 – 261.

Carlson, M. J., & Furstenberg, F. F., Jr. (2006). The prevalence and correlates of multipartnered fertility among urban U.S. parents. *Journal of Marriage and Family*, *68*, 718 – 732.

Cherlin, A. J. (2004). The deinstitutionalization of American marriage. *Journal of Marriage and Family*, *66*, 848 – 461.

Cherlin, A. J., Burton, L. M., Hurt, T. R., & Purvin, D. M. (2005). The influence of physical and sexual abuse on marriage and cohabitation. *American Sociological Review*, *69*, 768 – 789.

Cohan, C. L. & Kleinbaum, S. (2002). Toward a greater understanding of the cohabitation effect: Premarital cohabitation and marital communication. *Journal of Marriage and Family*, *64*, 180 – 192.

DeLeire, T., & Kalil, A. (2005). How do cohabiting couples with children spend their money? *Journal of Marriage and the Family*, *67*, 286 – 295.

DeMaris, A. (1995). A tutorial in logistic regression. *Journal of Marriage and the Family*, *57*, 956 – 968.

DeMaris, A., & MacDonald, W. (1993). Premarital cohabitation and marital instability: A test of the unconventionality hypothesis. *Journal of Marriage and the Family*, *55*, 399 – 407.

DeMaris, A., & Rao, K. V. (1992). Premarital cohabitation and subsequent marital stability in the United States: A reassessment. *Journal of Marriage and the Family*, *54*, 178 – 190.

Dush, C. M. K., Cohan, C. L., & Amato, P. R. (2003). The relationship between cohabitation and marital quality and stability: Change across cohorts? *Journal of Marriage and Family*, *65*, 539 – 549.

Edin, K., & Kefalas, M. (2005). *Promises I can keep: Why poor women put motherhood before marriage*. Berkeley: University of California Press.

Glenn, N. D. (2002). A plea for greater concern about the quality of marital matching. In A. J. Hawkins, L. D. Wardle, & D. O. Coolidge (Eds.), *Revitalizing the institution of marriage for the twenty-first century* (pp. 46 – 58). Westport, CT: Praeger.

Goldscheider, F., & Sassler, S. (2006). Creating stepfamilies: Integrating children into the study of union formation. *Journal of Marriage and Family*, *68*, 275 – 291.

Graefe, D. R., & Lichter, D. T. (2007). When unwed mothers marry: The marital and cohabiting partners of midlife women. *Journal of Family Issues*, *28*, 595 – 622.

Guzzo, K. B., & Furstenberg, F., Jr. (2007). Multipartnered fertility among American men. *Demography*, *44*, 583 – 601.

Harknett, K., & McLanahan, S. S. (2005). Racial and ethnic differences in marriage after the birth of a child. *American Sociological Review*, *69*, 790 – 811.

Harris, D. A., & Parisi, D. (2005). Gender role ideologies and marriage promotion: State policy choices and suggestions for improvement. *Review of Policy Research*, *22*, 841 – 858.

Holley, P., Yabiku, S., & Benin, M. (2006). The relationship between intelligence and divorce. *Journal of Family Issues*, *27*, 1723 – 1748.

Kenney, C. T. (2004). Cohabiting couple, filing jointly? Resource pooling and U.S. poverty policies. *Family Relations*, *53*, 237 – 247.

Lehrer, E. L. (2004). The role of religion in union formation: An economic perspective. *Population Research and Policy Review*, *23*, 161 – 185.

Lichter, D. T., Batson, C., & Brown, J. B. (2004). Welfare reform and marriage promotion: The marital expectations and desires of single and cohabiting mothers. *Social Service Review*, *38*, 2 – 25.

Lichter, D. T., & Graefe, D. R. (2001). Finding a mate? The marital and cohabitation histories of unwed mothers. In L. L. Wu & B. Wolfe (Eds.), *Out of wedlock: Causes and consequences of nonmarital fertility* (pp. 317 – 343). New York: Russell Sage Foundation.

Lichter, D. T., & Graefe, D. R. (2007). Men and marriage promotion: Who marries unwed mothers? *Social Service Review*, *81*, 397 – 421.

Lichter, D. T., Qian, Z., & Mellott, L. (2006). Marriage or dissolution? Union transitions among poor cohabiting women. *Demography*, *43*, 223 – 240.

Manning, W. D., & Smock, P. J. (2005). Measuring and modeling cohabitation: New perspectives from qualitative data. *Journal of Marriage and Family*, *67*, 989 – 1002.

McGinnis, S. L. (2003). Cohabiting, dating, and perceived costs of marriage: A model of marriage entry. *Journal of Marriage and the Family*, *65*, 105 – 116.

Moore, K., Jekielek, S., Bronte-Tenkew, J., Guzman, L., Ryan, S., & Redd, Z. (2004). *What is healthy marriage? Defining the concept*. Washington, DC: Child Trends. Retrieved July 28, 2008 from http://www.childtrends.org/Files/CT_HealthyMarriage.pdf

Musick, K. (2002). Planned and unplanned childbearing among unmarried women. *Journal of Marriage and Family*, *64*, 915 – 929.

Musick, K. (2007). Cohabitation, nonmarital childbearing, and the marriage process. *Demographic Research*, *16*, 249 – 286.

Nock, S. L. (2002). The social costs of de-institutionalizing marriage. In A. J. Hawkins, L. D. Wardle, and D. O. Coolidge (Eds.), *Revitalizing the institution of marriage for the twenty-first century* (pp. 1 – 13). Westport, CT: Praeger.

Osborne, C., & McLanahan, S. (2007). Partnership instability and child well-being. *Journal of Marriage and Family*, *69*, 1065 – 1083.

Pallitto, C. C., Campbell, J. C., & O'Campo, P. (2005). Is intimate partner violence associated with unintended pregnancy? A review of the literature. *Trauma Violence & Abuse*, *6*, 217 – 235.

Phillips, J. A., & Sweeney, M. A. (2005). Premarital cohabitation and marital disruption among White, Black, and Mexican American women. *Journal of Marriage and Family*, *67*, 296 – 314.

Preston, S. H., Heuveline, P., & Guillot, M. (2001). *Demography: Measuring and modeling population processes*. Oxford UK: Blackwell.

Qian, Z., Lichter, D. T., & Mellott, L. (2005). Out-of-wedlock childbearing, marital prospects and mate selection. *Social Forces*, *84*, 473 – 491.

Raley, R. K. (2001). Increasing fertility in cohabiting unions: Evidence for the second demographic transition in the United States? *Demography*, *38*, 59 – 66.

Raley, S., & Bianchi, S. (2006). Sons, daughters, and family processes: Does gender of children matter? *Annual Review of Sociology*, *32*, 401 – 421.

Reed, R. M. (2006). Not crossing the "extra line": How cohabitors with children view their unions. *Journal of Marriage and Family*, *68*, 1117 – 1131.

Sassler, S. (2004). The process of entering into cohabiting unions. *Journal of Marriage and Family*, *66*, 491 – 505.

Sassler, S., Cunningham, A., & Lichter, D. T. (in press). Intergenerational patterns of union formation and relationship quality. *Journal of Family Issues*, *30*.

Sassler, S., & McNally, J. (2003). Cohabiting couples' economic circumstances and union transitions: A re-examination using multiple imputation techniques. *Social Science Research*, *32*, 553 – 578.

Sassler, S., Miller, A., & Favinger, S. (in press). Planned parenthood? Fertility intentions and experiences among cohabiting couples. *Journal Family Issues*, *29*.

Schoen, R., Landale, N. S., & Daniels, K. (2007). Family transitions in young adulthood. *Demography*, *44*, 807 – 820.

Seltzer, J. A. (2000). Families formed outside of marriage. *Journal of Marriage and Family*, *62*, 1247 – 1268.

Smock, P. J. (2000). Cohabitation in the United States: An appraisal of research themes, findings, and implications. *Annual Review of Sociology*, *26*, 1 – 20.

Stanley, S. M., Rhoades, G. K., & Markman H. J. (2006). Sliding versus deciding: Inertia and the premarital cohabitation effect. *Family Relations*, *55*, 499 – 509.

Stanley, S. M., Whitton, S. W., & Markman, H. J. (2004). Maybe I do: Interpersonal commitment and premarital or nonmarital cohabitation. *Journal of Family Issues*, *25*, 496 – 519.

Sweeney, M. M. (2002). Two decades of family change: The shifting economic foundations of marriage. *American Sociological Review*, *67*, 132 – 147.

Sweeney, M. M., & Phillips, J. A. (2004). Understanding racial differences in marital disruption: Recent trends and explanations. *Journal of Marriage and Family*, *66*, 639 – 650.

Teachman, J. D. (2003). Premarital sex, premarital cohabitation, and the rise of subsequent marital dissolution among women. *Journal of Marriage and Family 65*, 444 – 455.

Teachman, J. D. (2008). Complex life course patterns and the risk of divorce in second marriages. *Journal of Marriage and Family*, *70*, 294 – 305.

Teachman, J. D., & Polonko, K. A. (1990). Cohabitation and marital stability in the United States. *Social Forces*, *69*, 207 – 220.

Teitler, J. O., & Reichman, N. E. (2008). Mental illness as a barrier to marriage among unmarried mothers. *Journal of Family and Marriage*, *80*, 772 – 782.

Waller, M. R., & McLanahan, S. (2005). "His" and "her" marriage expectations: Determinants and consequences. *Journal of Marriage and the Family*, *67*, 53 – 67.

Wilcox, W. B., & Wolfinger, N. H. (2007). Then comes marriage? Religion, race, and marriage in urban America. *Social Science Research*, *36*, 569 – 589.

Williams, K., Sassler, S., & Nicholson, L. M. (2008). For better or for worse? The consequences of marriage and cohabitation for single mothers. *Social Forces*, *86*, 1481 – 1511.

Wu, Z., & Schimmele C. M. (2005). Repartnering after first union disruption. *Journal of Marriage and Family*, *67*, 27 – 36.