

**From Sexual Involvement to Coresidential Unions:
New Findings from the 2002 NSFG**

Sharon Sassler, Department of Policy Analysis & Management, Cornell University
Amanda Miller, Department of Sociology, The Ohio State University
Sarah Favinger, Department of Sociology, The Ohio State University

The likelihood that contemporary adults will engage in sexual activity prior to forming a union has increased over the past few decades. Despite the current administration's desire to emphasize 'abstinence only' programs in high school health curriculums, by the time they have reached their late teen years at least three-fourths of men and women have had intercourse, and more than two-thirds of all sexually experienced teens have had two or more partners (AGI 2005). While some programs promote the message that "love can wait," the median age at first marriage has increased dramatically over the past three decades, rising to 25.1 years for women and 26.8 years for men in 2000 (Fields and Casper 2001). Compared to the 1970s, when marriage took place at much younger ages, nowadays there is a longer period of time during which unmarried young adults are 'at risk' of engaging in sexual relations. To date, however, little is known about the connection between sexual involvement and relationship progression – whether into cohabiting or marital unions or as a part of component of relationships. This paper explores the tempo of transitions from sexual involvement to coresidential unions – both cohabitation and marriage – for American men and women in the early years of the 21st century.

Americans are more accepting today than in the past of premarital sex. At the close of the twentieth century only 40% of women respondents in the General Social Survey agreed that having sexual relations before marriage was always or almost always

wrong, and an even smaller proportion of men (29.8%) expressed similar sentiments (Thornton and Young-DeMarco 2001). This was a substantial decrease from the shares reporting similar levels of disapproval in the early 1970s (56.4% for women and 46.0% for men). Furthermore, the proportion of unmarried adults living with a romantic partner has also increased substantially (Bumpass and Sweet 1989; Bumpass and Lu 2000; Raley 2000). In fact, living together in a sexually intimate relationship prior to marriage is now normative, with over half of recent marriages preceded by a period of cohabitation (Raley 2000).

Despite repeated calls for the need to pay more attention to how relationships progress (Smock and Manning 2001; Surra 1990), such studies are generally limited by data constraints. The existing literature on ‘union formation’ has focused on either marriage or cohabitation, both shared residential situations (Clarkberg, Stolzenberg, and Waite 1995; Oppenheimer 2003; Sassler and Goldscheider 2004; Sassler and Schoen 1999), or transitions from cohabitation to marriage (Lichter, Qian and Mellott 2004; Manning and Smock 1995; Oppenheimer 2003; Sassler and McNally 2003). Relatively little is known about whether and how sexual intimacy affects transitions into coresidential unions, or how prior relationship experiences shape the rapidity of sexual involvement and subsequent union formation. Yet the timing and duration of sexual involvement prior to entrance into either marriage or cohabitation is an important event of demographic interest on its own. In addition to serving as an indicator of exposure to the risk of childbearing, involvement in non-marital sexual activity reflects views regarding the importance of marriage, the role served by cohabitation, as well as perceived responsibilities towards sexual partners.

Newly released data from Wave 6 of the National Survey of Family Growth, conducted in 2002, enables us to examine the tempo of transitions from sexual involvement to coresidential unions for men and women. Our study advances existing research in two important ways. First, we examine men as well as women, as Wave 6 expanded on previous NSFG data collections by surveying men. Second, we apply event history models of duration from sexual involvement to either a cohabitation or a marriage, thereby studying a larger period. This approach is more sensitive to potentially large cultural and ethnic group differences in onset of sexual activity as well as entrance into cohabitation and marriage. The goals of this study are to: (a) document the duration from first sexual involvement with a current partner to union formation, whether a cohabitation or a marriage; (b) distinguish whether transition patterns from sexual involvement to union formation differ depending upon whether the union is a cohabitation or a marriage; and (c) determine the factors predicting transition time, focusing on attributes that precede the transition into a sexual union, and distinguishing across different types of unions. The results shed light on the ways that American's relationships are evolving over time and the role that sexual intimacy play in this transformation.

Data and Methods

This paper utilizes event-history analysis to model the duration from sexual involvement with a romantic partner to union formation. Data are from the recently released National Survey of Family Growth, Wave 6 (2002). The most recent wave of the NSFG enables us to explore the relationship development of men as well as women. Our analysis focuses on all women and men between the ages of 15 and 44 who report

having had a sexual partner in the past 12 months. We include those who are married, cohabiting, and dating, as well as those who had recently dissolved a relationship. Our analysis is limited to the most recent sexual relationship, as detailed information on the date of first sex was obtained only for the most recent partner. This unfortunately precludes our ability to study whether individuals' relationship progressions varies with experience, though we are able to control for both the number of prior sexual and coresidential partners. Our examination enables us to determine whether there are duration patterns evident in transitions from sexual involvement to marriage, to cohabitation, and what factors mediate this transition.

As in other studies examining relationship progression (primarily the transition from cohabitation to marriage), our analysis begins by presenting life-table estimates of the proportion of women and men who enter into a union following the initiation of a sexual relationship. We subsequently present life-table estimates of the proportion entering a cohabitation or a marriage. Next, we use multinomial logistic regression to examine the likelihood of marrying, cohabiting, remaining in a 'dating' non-coresidential relationship, or dissolving the relationship. These outcomes are treated as separate risks; the reference category is those who remain in a sexual relationship without forming a coresidential union. Exposure (to union formation) is measured from the date of sexual initiation to entrance into or exit from a coresidential union. Couples are censored upon entering a coresidential union, the last date they reported having sexual relations with their partner if the relationship dissolved, or the date of the survey.

Using logistic regression, we aggregate person months of risk and estimate the effects of the explanatory variables on the trichotomous dependent variable. Our

dependent variable, duration from sexual involvement to union formation, is measured in person months. This approach is similar to a continuous-time hazard model (Kalbfleisch and Prentice 1980). Data on informal marital status indicates if respondents were married, cohabiting, never married, or widowed, separated, or divorced. For those who are currently married, information on whether one lived with a partner prior to marriage, number of times married, date of first sex, and date of the current marriage are used to construct the dependent variable. For cohabitators, the date of first sexual involvement with the most current partner and the reported date of moving in together are utilized to estimate the duration to union. As for those not currently married or cohabiting but currently involved in a romantic and sexual relationship, the dependent variable utilized information on the date of first and how the respondent classified the current relationship. Finally, if respondents had been sexually involved with a partner in the past 12 months but were no longer, we utilize information on the beginning of their sexual relationship and when they last engaged in sexual activity to determine the duration from sexual involvement to the dissolution of a relationship. We construct a continuous time parameter measuring the period spent exposed to the risk of a union, plus whether or not a union (or dissolution) occurred. Those who do not enter into a union by the time of their interview are right-censored, and the model assumes that their spell ends sometime in the future.

The sample sizes for these groups, while preliminary, are sizeable. For women, of those who reported engaging in sexual activity in the past year there are 2,976 who are currently married, 702 who are cohabiting, 1,696 who are never married and not cohabiting, and 625 women who are either widowed, divorced, or separated. Because of

some missing data, our final sample sizes will be somewhat smaller. The overall sample of men is somewhat smaller, as less than 5,000 were interviewed; nonetheless, several thousand men are eligible for the study. Both men and women contribute sizeable numbers of person-months of risk to entrance into coresidential unions.

Independent Variables

Unlike many longitudinal studies of union transitions, which often examine current activities and achievements, the retrospective nature of the data collection limits the predictive factors we can examine. For example, although much of the existing research hypothesizes that the timing and type of union is related to employment (Oppenheimer 2003; Sassler and Goldscheider 2004; Sweeney and Cancian 2005), we cannot determine the type of work women pursued at the time of entering into either their sexual or coresidential union. Furthermore, while we do know the highest level of education received, information on *when* this education was obtained is not available beyond the level of a high school diploma. The absence of this information is an important limitation that precludes empirical testing of the connections between work, schooling, and family formation. However, we can determine various factors that may be predictive of duration length.

We divide these into measures of family structure, demographic attributes of the respondent, and sexual history information. Measures of family structure that may be important are whether parents were married at respondent's birth, if respondents grew up in an intact family and if not, whether a parental disruption was experienced prior to age 14. We rely on measures of mother's and father's highest degree earned to indicate family class background. Measures of respondent's own demographic attributes include

their age, race and ethnicity, whether they are foreign or native-born, their marital status prior to union entrance, and their parental status. Our final controls are of measures of the respondents' sexual history: the number of prior partners in lifetime as well as in the past year, whether they had ever cohabited in the past, their age when they first had sex with their partner, and some information on the partner, such as his age, race, educational level, marital status, and parental status.

Preliminary Results: Women

Estimating duration variables requires limiting our analysis to women who are in a current relationship, as well as restricting it to those who have had a sexual partner in the last year. We estimated our durations separately by union status at the time of the interview. This leaves us with 2,813 married women, 622 cohabiting women,¹ and 2,341 other women who have had at least one sexual partner in the prior year.

Table 1 presents preliminary results for some of the descriptive variables in the analysis, as well as means for the dependent variables. The first two columns present means for women who were currently married at their interview, distinguishing between those who lived with their husband prior to marriage and those who did not. The third column presents results for currently cohabiting women. The duration from sexual involvement to coresidence is shortest for women who cohabited prior to marriage, though this duration is not significantly different from the duration to union for women who did not live with their husbands before the wedding. The duration for currently

¹ A total of 72 cohabiting women were missing data on timing of entrance into their current cohabiting union, and were therefore excluded from the analysis. Preliminary study suggests that many of those missing this data were in higher-order cohabitations; their entrance into cohabiting unions from sexual involvement may therefore have been more rapid.

cohabiting women is intermediate; it may be that the duration from sexual involvement to moving in together has become longer among younger cohorts of women.

Currently married women are significantly older than the cohabiting women in the sample; for the analysis, this variable will be modified to reflect birth cohort rather than age. Turning to some of the predictor variables, it is evident that currently cohabiting women have had more sexual partners, both in the prior year and over their lifetimes, than married women, though married women who cohabited first had significantly more sexual partners than did those who married without first living with their spouse. Current cohabitators also have had, on average, a larger number of prior cohabiting partners. Current cohabitators are also different from marrieds, both those who lived with their partner prior to marriage and those who didn't, in having significantly more children born outside of marriage, as well as within cohabiting unions. We will subsequently explore the effect that these factors have on the duration from sexual involvement to living together.

Current Status of the Project

At the present time, we are constructing the data set and running preliminary survival models of entrance into coresidential unions for the women. By November we intend to have completed the data construction and cleaning for both the men and women, and will then begin our multivariate analysis. We anticipate having a complete draft of the paper by early February.

While our work is still too preliminary to definitively state our findings, the results indicate that sexual involvement prior to the formation of coresidential unions has become standard. Further analyses will enable us to determine if particular factors

shorten this duration period, or if for particular groups non-coresidential sexual involvement has begun to represent a challenge not only to marriage, but also to the benefits proffered through shared living arrangements. Our work is important in furthering what is known about relationship progression prior to the entrance into shared living arrangements.

Table 1. Descriptive Results for Women in Different Relationships

WOMEN: CURRENT UNION STATUS

	MARRIED			COHABITING
	Without Cohab	Cohabited First	Sig. Diff. between marrieds	
Duration to Union	17.296	15.903		16.138
Duration to Marriage	17.296	40.429	***	NA
Age of respondent	33.030	33.527	*	27.913
Partners in last year	1.014	1.031	*	1.154
# of opposite sex partners in lifetime	2.775	6.323	***	6.706
# of times married	1.076	1.306	***	0.278
# of former cohab partners	0.060	0.290	***	0.367
# of children born out of marriage	0.154	0.598	***	1.663
# of kids born in cohab unions	0.020	0.201	***	1.003
Public Assistance in 2001	0.045	0.062	*	0.146
N	1,319	1,494		622

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