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**TRENDS IN COHABITATION OUTCOMES: COMPOSITIONAL CHANGES AND
ENGAGEMENT AMONG NEVER-MARRIED YOUNG ADULTS**

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Trends in Cohabitation Outcomes: Compositional Changes and Engagement among Never-Married Young Adults

Abstract

Cohabitation is now the modal first union for young adults, and most marriages are preceded by cohabitation even as fewer cohabitations transition to marriage. These contrasting trends may be due to compositional shifts among cohabiting unions, which are increasingly heterogeneous in terms of cohabitation order, engagement, and the presence of children, as well as across socioeconomic and demographic characteristics. I construct five-year cohabitation cohorts for 18-34-year-olds from the 2002 and 2006-2010 cycles of the National Survey of Family Growth (n=17,890 premarital cohabitations) to examine the outcomes of cohabitations over time. Compared to earlier cohabitations, those formed after 1995 are more likely to dissolve and those formed after 2000 are less likely to transition to marriage even after accounting for the compositional shifts among individuals in cohabiting unions. Higher instability and decreased chances of marriage occur among both engaged and non-engaged individuals, suggesting society-wide changes in cohabitation over time.

The transition to adulthood now seem to includes at least one spell of cohabitation, as the majority of adults in their thirties have cohabited (Chandra, Martinez, Mosher, Abma, & Jones, 2005; Manning, 2013). This reflects the fact that although young adults are delaying marriage, they are still forming romantic unions (Raley, 2001). Yet fewer cohabitations are transitioning to marriage (Bumpass & Lu, 2000), and more individuals are experiencing multiple cohabitations (Lichter, Turner, & Sassler, 2010), suggesting that cohabitation is becoming delinked from marriage. At the same time, though, most marriages *are* preceded by cohabitation (Kennedy & Bumpass, 2008) even as fewer cohabitations are begun with marital intentions (Vespa, 2014). Thus, among young adults, marriage seems to be less of a part of the *cohabitation process* even as cohabitation has become more strongly linked to the *marriage process*.

Cohabitation is now a normative and acceptable union for young adults, in part due to delays in first marriage and the prolongation of young adulthood (Settersten & Ray, 2010). The proportion of women aged 19-24 who had ever cohabited, for instance, increased by over 30% between the late 1980s and 2010 (Manning, 2013). Relationships early in adulthood, however, are highly unstable, and more young adults are forming higher-order unions, as evidenced by the rise in serial cohabitation (Cohen & Manning, 2010; Lichter, Turner, & Sassler 2010). Commitment to marriage at the start of cohabitation, too, seems to be waning among young adults (Vespa, 2014), with those entering their union with marriage plans perhaps an increasingly select group with the strongest chances of marriage. Shifts in the socioeconomic and demographic profiles of cohabitators, such as a growing proportion of minority cohabitators or more cohabitators with children, may also contribute to changes in the outcomes of cohabiting unions over time. As such, examining trends in cohabiting outcomes during young adulthood requires increased attention to the potential role of compositional differences.

This research explicitly examines whether the link between cohabitation and marriage is changing among never-married young adults aged 18-34, using the 2002 and 2006-10 cycles of the National Survey of Family Growth. If the link between cohabitation and marriage has changed, we would expect that with each successive cohabitation cohort, fewer cohabitations will transition to marriage as more cohabitations dissolve. Alternatively, if differences across cohorts are minimal after accounting for shifts in key relationship characteristics such as initial marital intentions (proxied by engagement status), cohabitation order, and the presence of children as well as socioeconomic and demographic shifts, this would suggest that compositional differences among cohabitators are primarily responsible for the observed changes in the outcomes of cohabiting unions, with a greater proportion of cohabitations over time comprised of those with an elevated risk for dissolution and lower risk for marriage. This paper also tests the possibility that having marital intentions at the start of cohabitation is becoming more selective of those likely to marry by exploring whether trends in cohabitation outcomes differ by engagement status.

BACKGROUND

Although the age at marriage has risen (Kawamura, 2009), young adults are still forming coresidential unions at roughly the same ages, with their first union increasingly likely to be cohabitation (Raley, 2001; Kennedy & Bumpass, 2008). By 2009-2010, 60% of women aged 19-44 had ever cohabited, nearly doubling from 33% in 1987 (Manning, 2013). As cohabitation has become more common, researchers have attempted to understand how it fits into the relationship spectrum (Guzzo, 2006; Smock, 2000), variously characterizing cohabitation as an alternative to being single, a stage in the marriage process (either as a precursor to marriage or a

trial marriage), and as an alternative to marriage. Characterization attempts, however, are complicated by the heterogeneous nature of cohabitators, as cohabitation is common across race-ethnic groups, socioeconomic statuses, prior parenthood and union experiences, and so on. In the late 1990s, cohabitation in the United States largely seemed to function as an alternative to being single (Heuveline & Timberlake, 2004), despite the fact that most cohabitators expected to marry their partners (Brown, 2000). However, the rapid pace of change in union and family behaviors suggests that “what we know about intimate sexual unions can quickly become outdated” (Raley, 2000; p. 36), warranting continued attention.

To understand whether, and how, cohabitation has changed, we must reconcile two trends. On the one hand, most marriages are now preceded by cohabitation. Among first marriages formed in 1980-84, only 41% were preceded by cohabitation, rising to 56% for marriages formed in 1990-94, and to 66% for marriages formed in 2005-2009 (Manning, 2013), suggesting that cohabitation is now clearly institutionalized as part of the pathway to marriage (Cherlin, 2009). On the other hand, fewer cohabitations are transitioning to marriage (Bumpass & Lu, 2000), a pattern which implies a delinking of marriage and cohabitation. In 1995, 58% of first cohabitations had transitioned to marriage within three years (Bramlett & Mosher, 2002), falling to 51% in 2002 (Goodwin, Mosher, & Chandra, 2010) and 40% in 2006-2010 (Copen, Daniels, & Mosher, 2013). On the surface, these trends appear to be conflicting – that is, how can marriage be more strongly linked to cohabitation while cohabitation has become less strongly linked to marriage? Upon further inspection, though, they can largely be explained by the fact that marriage has become more selective and rare during the transition to adulthood, whereas cohabitation has not (Vespa & Painter, 2011).

Cohabitation outcomes

Although cohabitation seems to play a larger role in the marriage process (Kennedy & Bumpass, 2008), marriage is not always viewed as the inevitable goal or outcome of cohabitation (Manning & Smock, 2002), and this seems especially true among more recent cohorts and younger adults (Manning, Longmore, & Giordano, 2007). This is likely related to both attitudinal changes towards marriage (Cherlin, 2005) and broader economic changes impacting the affordability of marriage and altering the economic prerequisites and incentives for cohabitation and marriage (Lichter, Qian, & Mellott, 2006). Further, the emergence of higher-order cohabitations in recent cohorts (Lichter, Turner, & Sassler, 2010) suggests that more cohabitations are dissolving, for likely the same reasons. And although cohabiting unions are lasting longer, evidence suggests that most union transitions (dissolution or marriage) continue to occur within two years, with dissolution occurring a few months earlier, on average, than marriage (Copen, Daniels, & Mosher, 2013). As such, overall, we would expect that recently formed cohabitations are more likely to dissolve and less likely to transition to marriage than those formed in earlier time periods.

HYPOTHESIS 1A: Over time, cohabitation has become more likely to dissolve and less likely to transition to marriage.

Compositional shifts in cohabitation

Cohabitation has grown in prevalence and now occurs to individuals just beginning the transition to adulthood as well as those who have largely completed the transition (and indeed, cohabitation increasingly occurs throughout the life course, even among middle-aged and older adults (Brown, Lee, & Bulanda, 2006)). As noted by Schoen, Landale, and Daniels (2007), there are a variety of paths to, and in, young adulthood, and unions formed during this period are often quite

unstable. Men and women in their late teens and early twenties are rarely considering marriage, yet they often cohabit for economic reasons or convenience (Raley, Crissey, & Muller, 2007). Individuals in their mid-to-late twenties and early thirties might be considering marriage and want to test their relationship before marriage (Johnson, Stanley, Glen, Amato, Nock, Markman, & Dion, 2002), whereas others may decide to cohabit upon getting engaged (Oppenheimer, 2003). Not surprisingly, then, there is a fairly straightforward association between age and cohabitation outcomes, with younger cohabitators more likely to experience dissolution and less likely to transition to marriage than their older counterparts (Guzzo, 2009). There are few race-ethnic differences in the proportion who have ever cohabited, but there are large educational differences (Manning, 2013). Both socioeconomic status and race-ethnicity are associated with stability and outcomes, with minorities and less-educated individuals at a higher risk of dissolution whereas whites and better-educated individuals are more likely to marry (Rose-Greenland & Smock, 2013). To the extent that cohabitations are increasingly comprised of the younger adults, the less-educated, or minorities – those with a higher risk of dissolution and a lower risk of marriage – these compositional shifts may be partially responsible for changes over time in outcomes.

Beyond socioeconomic and demographic differences in who is cohabiting, though, are what appear to be key differences in the characteristics of the unions themselves. Rates of serial cohabitation, where individuals experience more than one cohabitation, increased nearly 40% over the late 1990s and early 2000s (Lichter, Turner, & Sassler, 2010). Relative to those with only one cohabitation, far fewer serial cohabitators reported themselves as engaged at the start of any of their cohabitations, they were less likely to have ever married, and they began cohabiting at fairly young ages (Cohen & Manning, 2010). The limited work on serial cohabitators suggests

that overall, those with more than one cohabitation are more disadvantaged than single-instance cohabitators (Cohen & Manning, 2010; Lichter, Turner, & Sassler, 2010). Cohabitations today are increasingly the setting of childbearing and rearing, too (Kennedy & Fitch, 2012; Lichter, 2012). Much of the rise in nonmarital fertility, for instance, is due to high levels of childbearing within cohabiting unions (Lichter, 2012). Many cohabitations also include children from prior relationships and are thus stepfamilies, accompanied by the elevated risk of instability seen among stepfamilies in general (Sweeney, 2010). Part of the decline in stability and transitions to marriage are also likely due to shifts in how cohabitators view their union's future in terms of marriage. Although there is a strong positive association between being engaged at the start of cohabitation and subsequent marriage (Guzzo, 2009), there is evidence that these initial marital intentions are declining over time, particularly among those who have cohabited in the past (Vespa, 2014). Overall, this suggests substantial variation in the composition of individuals in cohabiting unions over time. As such, changes in cohabitation outcomes over time could be due to compositional differences among cohabitators, such as a growing proportion of cohabitations among those who are otherwise at high risk for dissolution and/or low risk for marriage (i.e., those in higher-order unions or cohabiting stepfamilies).

HYPOTHESIS 1B: Changes in outcomes over time among cohabiting unions are attenuated when accounting for compositional shifts in socioeconomic and demographic characteristics among cohabiting individuals as well as shifts in cohabitation order, the presence of children, and marital intentions.

Changes in intentions to marry and cohabitation outcomes

If cohabitators have become decreasingly likely to begin their union with plans to marry, it is possible that the signaling function of engagement has changed. To the extent that cohabitation

has become more socially acceptable, beginning a cohabitation with an engagement may have become an increasingly selective mechanism over time, occurring only among the most committed individuals and couples. As such, it may be that only those without initial marriage plans are exhibiting increased instability and declining chances of marriage over time.

HYPOTHESIS 2: Changes in the outcomes of cohabitations over time are more pronounced among those who are not engaged.

This paper contributes to our existing knowledge about trends in cohabitation by explicitly considering whether the apparent increase in instability and the decoupling of cohabitation and marriage are driven primarily by compositional shifts along two dimensions: (1) socioeconomic and demographic characteristics of individuals in cohabiting unions and (2) union-specific factors (marital intentions, cohabitation order, and the presence of children). Further, by disaggregating unions by engagement, this work examines whether shifts in outcomes are occurring even among those who are, ostensibly, the most committed to marriage. If compositional shifts among those in unions explain the changes in cohabitation outcomes, this implies that unions themselves have not become unstable and delinked from marriage and thus there is no movement away from stable unions. Conversely, if cohabitations are actually becoming less stable and less likely to transition to marriage – even among those who explicitly planned to marry their cohabiting partner – this suggests aggregate social changes are destabilizing one of the most common unions Americans experience.

METHOD

The analyses pool the 2002 and 2006-10 cycles of the National Survey of Family Growth (NSFG), a nationally representative cross-sectional household-based survey of men and women

aged 15-44. The data are cross-sectional but contain a detailed retrospective relationship history of coresidential unions, and the NSFG surveys are designed to ensure comparability across cycles to provide time trend information. The sample includes 22,980 first and higher-order cohabiting unions formed 1980 or later to 16,081 individuals aged 15 or older at the start of cohabitation with valid information on start and end dates of unions; there were too few observed cohabitations prior to 1980 to include in the analyses. The analyses are restricted to those with valid engagement information (excluding 79 individuals); engagement status at the start of cohabitation is based on the following question, asked for each cohabitation: “At the time you began living together, were you and [partner] engaged to be married or did you have definite plans to get married?” Six cases are missing information on one of the control variables (nativity), bringing the potential sample size to 20,687 cohabitations among 15,336 individuals.

The NSFG samples are representative of the national population at the time of the survey when using the weights to account for the complex sampling design. It is important to note, though, that as we look back further in time, the sample is increasingly less representative of the national population *at that time*. That is, the 40-44 year-olds sampled in 2002 are representative of all 40-44 year-olds living in households in the U.S. in 2002 but may not be representative of 20-24 year-olds in 1982 if the population has changed substantially over the past few decades. Further, the observed age range increases over time; in 2002, we observe men and women aged 15-44 from the 2002 cycle, but going back to 1985, for example, individuals from this cycle of the data are only observed up to age 27. Similarly, individuals interviewed in 2008 would only be observed through age 21 in 1985. Cohabitations formed several years prior to the date of the survey are disproportionately comprised of unions formed at the youngest ages and are thus accompanied by the well-established negative association between early age at union formation

and subsequent stability (Guzzo, 2009; Tzeng & Mare, 1995), whereas cohabitations formed in the years immediately before the survey, when a broader age range is observed, are more representative. Due to the age selectivity in the sample, the analysis is further limited to the age groups for which there are a sufficient time series of observations and large sample sizes – individuals aged 18-34, disaggregated into four age groups: 18-19 (n = 3,976), 20-24 (n = 8,245 cohabitations), 25-29 (n = 3,985 cohabitations), and 30-34 (n = 1,684 cohabitations). These age restrictions produce a sample of 17,890 cohabitations to 13,107 individuals, comprising 86.1% of all observed premarital cohabitations formed after 1980 among individuals aged 15-44 at the time of survey. To analyze change over time, I created six cohabitation cohorts: 1980-1984, 1985-1989, 1990-1994, 1995-1999, and 2000-2004, and 2005 and later.

The independent variables are grouped into two categories: (1) socioeconomic and demographic characteristics and (2) union and fertility characteristics. Socioeconomic and demographic measures include age (18-19, 20-24, 25-29, 30-34), gender, race/ethnicity/nativity (non-Hispanic white, non-Hispanic black, foreign-born Hispanic, native-born Hispanic, other), respondent's mother's education (less than high school or missing, high school degree, some college, college degree or higher), whether the respondent's mother had a birth prior to age 18, a time-varying indicator of whether the respondent had a high school degree, and family structure at age 14 (both biological parents, stepfamily, other). Union and fertility characteristics include engagement status, cohabitation order, whether the respondent had any children born prior to cohabitation (dichotomously measured since few respondents had more than one child prior to cohabitation), and a time-varying measure of whether a child was born during cohabitation.

Analytical approach

I first briefly describe the socioeconomic, demographic, and union-specific characteristics of the analytical sample of individuals in cohabiting unions by cohabitation cohort. I then show graphs from multiple-decrement life tables, which explore whether dissolution and marriage risks have changed over time and vary by engagement status; these graphs show the hazard curves within 36 months of starting cohabiting, as most cohabitations are no longer intact after this point (Goodwin, Mosher, & Chandra, 2010). Since neither descriptive statistics nor life tables can simultaneously account for socioeconomic, demographic, and union factors, I turn to multivariate analyses to more thoroughly examine trends over time in cohabitation using event history models accounting for exposure and duration to examine outcomes. The data are converted into person-months, with exposure beginning the month that the cohabitation begins and ending when the union dissolves, transitions to marriage, or at the time of interview. The dependent variable is a three-category variable indicating the union is still intact, has dissolved, or has transitioned to marriage, and analyses use multinomial logistic regression. The models include a control for union duration, specified as a time-varying piecewise nonlinear spline (less than 6 months, 7-12 months, 13-24 months (omitted), 25-48 months, and 49 or more months), as the association between union transition and duration is nonlinear.

These analyses follow a two-pronged approach. First, I run four nested models, with Model 1 including only controls for cohabitation cohort (and duration), Model 2 adding socioeconomic and demographic characteristics to Model 1, Model 3 adding union and family characteristics to Model 1, with Model 4 as the full model. These nested models test Hypotheses 1A and 1B, examining whether compositional differences explain any changes in outcomes over

time. Second, I run models stratified by engagement to explore whether changes in outcomes are driven by those without marital intentions to test Hypothesis 2.

RESULTS

Descriptive cohabitation characteristics

Table 1 displays the socioeconomic, demographic, and union characteristics of the analytical sample of cohabiting unions across cohorts; readers should recall that the sample in general is not representative of all cohabiting unions during the specified time period. In the earliest cohorts, younger individuals were over-represented due to the age structure of the NSFG; thus, the earliest cohorts were less representative of the overall population of cohabiting unions than later cohorts. As a result, it is not surprising that the proportion of cohabitations that were first cohabitations declined across cohorts. Similarly, the widening age range across cohorts likely contributed to the increasing proportion across cohorts of those with children at the start of the union, although the proportion who report having children born *during* cohabitation stayed fairly stable, at about fifth of cohabitations. In the analytical sample, there was no clear downward trend in the proportion of cohabitations that were begun with engagement, hovering between 40-45% across cohorts. There were also differences across the cohorts in the distribution of cohabitators by race-ethnic-nativity, education, and family structure during adolescence.

– Table 1 here –

Next, I present hazard curves for the first 36 months of cohabitation by engagement status, looking at the risk of dissolution and the risk of marriage over time, in Figures 1 through 4. As would be expected, dissolution risks were higher, and marriage risks lower, for the engaged compared to those who were not engaged at the start of cohabitation. This is neither

surprising nor new. What is interesting, though, are the differences across cohabitation cohorts. Looking first at dissolution risks among the engaged, the first few cohorts – cohabitations formed in the 1980s and the early 1990s – were tightly clustered and largely exhibited the same general increase over time in the risk of dissolution. By the late 1990s, dissolution risks were noticeably higher at longer durations than the earlier cohorts. But the cohabitations formed after 2000 really stand out; unions formed between 2000 and 2004 faced much higher dissolution risks at every duration compared to the earlier cohorts of cohabitations, and the cohabitations formed after 2005 were even more at risk of dissolution. The elevated risk of dissolution for more recent cohorts were also present for the non-engaged, though the level of risk was higher at every duration than for the engaged, and unions formed in the late 1990s were not noticeably different than those in the 1980s and early 1990s. The trends across cohorts were even more stark when considering that the youngest ages groups were over-represented in the early cohorts. As such, the observed dissolution risks for the earlier cohorts were almost certainly overestimated, given that younger individuals are more likely to experience union dissolution (Guzzo, 2009; Tzeng & Mare, 1995). If the earliest cohorts had a more representative age distribution, the dissolution risks would likely be lower, making the changes across cohorts more dramatic.

– Figures 1 through 4 here –

Turning now to marriage, the risks across cohorts were more tightly clustered and exhibited less variation over time compared to dissolution risks, and at every duration, the risk of marriage was lower among the non-engaged. Still, there are some appreciable differences across cohorts. Each successively more recent cohabitation cohort was less likely to transition to marriage through the early 1990s for engaged cohabitators, with minimal differences between cohabitations formed in the early and late 1990s. As with dissolution, more recent cohabitations

stand out. There appeared to be a sharp decline in the risk of marriage between cohabitations formed prior to 2000 and those formed after 2000. By the end of the 36 months of duration shown here, there was roughly a 10 percentage point difference in the proportion married among cohabitations formed prior to 2000 and those formed after 2000. For those who were not engaged at the start of cohabitation, risks were slightly less clustered together, but the same overall trends were present. The declining risk of marriage started with the 1995-99 cohort but was still stronger for the 2000-04 and 2005 and later cohabitation cohorts. And as before, because of the over-representation of younger adults in the earliest cohorts, who are less likely to marry than older cohabitators (Guzzo, 2009), the decline in marriage risks across cohorts was likely understated. Thus, there is support for Hypothesis 1A that cohabitation outcomes have changed over time, with the increase in dissolution seemingly larger than the decrease in marriage.

Overall, then, while the hazard curves demonstrate increasing dissolution and decreasing marriage among cohabiting unions over time, the descriptive characteristics shown in Table 1 reveal that the analytical sample varied substantially across a range of socioeconomic and demographic characteristics as well as union and fertility indicators across cohorts. As such, I turn to multivariate analyses to examine changes over time more thoroughly.

Predicting outcomes across cohorts

Table 2 presents the nested models for cohabitations among never-married men and women aged 18-34. These models test Hypotheses 1A and 1B, which are competing hypotheses, and show the relative risk ratios (RRR) in a series of nested models designed to demonstrate the extent to which compositional differences among those in unions contribute to changes in union stability and outcomes over time. Model 1 is a baseline model, including only cohort (1990-94 as the

reference category) and duration controls. Model 2 adds socioeconomic and demographic factors to the baseline model, and Model 3 adds union and fertility characteristics to the baseline model, with Model 4 containing the full set of covariates. The baseline model in Model 1 supports Hypothesis 1A – cohabitations formed in later years were more likely to dissolve and less likely to transition to marriage than remain intact relative to cohabitations formed in 1990-94, and the magnitude of the relative risk ratios increased across cohorts, suggesting that cohabitations have become increasingly unstable and less connected to marriage over time. Relative to cohabitations formed between 1990 and 1994, cohabitations formed from 1995-99, 2000-04, and 2005 and later were 13%, 49%, and 87%, respectively, more likely to dissolve than remain intact. The lower risk of marriage over remaining intact occurred only for the last two cohabitation cohorts (2000-04 and 2005 and later), which were about 18% and 31% less likely to marry than remain intact, respectively. Although Hypothesis 1A was largely supported, there was some evidence that the earliest cohort of cohabitations were also unstable; cohabitations formed in 1980-84 were about 20% more likely to dissolve than remain intact compared to cohabitations formed a decade later. Duration largely worked as would be expected; cohabitations of six or fewer months were less likely to dissolve or transition to marriage than those 13-24 months in duration, with no differences between 7-12 months and 13-24 months. Cohabitations greater than two years in duration were less likely to either dissolve or marry, and the longer a cohabiting union lasted, the more likely it was to remain intact as a cohabiting union.

– Table 2 here –

Model 2 adds in socioeconomic and demographic characteristics. As shown in Table 1, compared to cohabitations formed in earlier time periods in the analytical sample, more recent

cohabitation cohorts included more individuals in their late twenties and early thirties, more non-white individuals, and more individuals who grew up in non-intact families but had more educated mothers. This model tests whether these compositional differences account shifts in dissolution and marriage risks over time (Hypothesis 1B), and the short answer is they do not. Although socioeconomic and demographic characteristics were associated with cohabitation outcomes, they did not explain the association with cohabitation cohort and outcomes; in fact, a positive association with marriage and early cohorts emerged. Changes in the risk of dissolution relative to remaining intact were largely the same, with cohabitations formed from 1995 onward increasingly likely to dissolve. Cohabitations formed in the early 1980s were no longer more likely to dissolve than those formed in the early 1990s, largely due to the presence of the control for age, given the over-representation of the very young in the early cohorts. In the presence of socioeconomic and demographic controls, cohabiting unions formed in 1980-84 were 27% more likely and unions formed in 1985-89 were 13% more likely to transition to marriage than remain intact relative to cohabitations formed in 1990-94. Cohabitations formed in the late 1990s were not significantly different in the risk of marriage relative to those formed in the early 1990s, but those formed after 2000 were decreasingly likely to end in marriage, with a similar magnitude as seen in Model 1.

Although the socioeconomic and demographic characteristics did not account for the association between cohort and outcomes, they were significantly associated with outcomes in their own right. Younger cohabitators were more likely to experience dissolution and less likely to marry than those aged 25-29, although those in their early thirties did not significantly differ from those in their late twenties. Women were slightly less likely to marry than remain cohabiting relative to men (RRR = 0.93). There were few race-ethnic differences in dissolution

risks, though foreign-born Hispanics were less likely to experience dissolution than whites (RRR = 0.41). However, compared to whites, all groups were less likely to transition to marriage than remain cohabiting; blacks and Hispanics were about 40% less likely to marry than whites, while those in the “other” category were about 25% less likely. Individuals whose mother had at least some college were more likely to dissolve their cohabiting unions relative to those with a high school degree, and those who lived in an “other” family type (primarily those in single-parent families) were about 20% less likely to marry over remaining in an intact cohabitation compared to their peers who lived with both biological parents at age 14. As with cohabitation cohort, the effects of duration changed only slightly with the inclusion of socioeconomic and demographic controls.

In Model 3, changes in the characteristics of cohabiting unions in terms of engagement, cohabitation order, and fertility are investigated as potential factors which may explain cohort differences in dissolution and marriage (Hypothesis 1B). Again, however, accounting for compositional shifts in among the characteristics of the union did not attenuate the association between the time period in which a cohabitation was formed and its risk of dissolution or marriage, even though these factors were significantly and directly associated with cohabiting outcomes. Cohabitations formed after 1995 were still increasingly likely to dissolve relative to those formed between 1990-1994, and unions formed after 2000 remained decreasingly likely to transition to marriage. Unions formed in 1980-84 were both more likely to dissolve and more likely to marry than those formed in 1990-94, but the differences were only marginally significant.

The characteristics of the cohabiting union, however, were significant, as expected. First cohabitations differed from second cohabitations, being both more likely to dissolve (RRR =

1.38) and less likely to end in marriage (RRR = 0.86). Third cohabitations were about 40% more likely to dissolve than second cohabitations but did not differ in the risk of marriage (in fact, first and third cohabitations did not differ from each other, not shown). Engagement was particularly important, as expected; those who report being engaged or having marriage plans at the start of cohabitation were less likely to dissolve (RRR = 0.59) and substantially more likely to marry (RRR = 2.34) than their non-engaged counterparts. Cohabitors who had children prior to the union did not have higher risks of dissolution than those who were childless, but they were about 40% less likely to transition to marriage. Having a child during cohabitation reduced both dissolution and marriage risks. The association between duration and outcomes changed slightly with the inclusion of characteristics of the cohabiting union. Cohabitations between two and four years of duration became only marginally less likely to dissolve than those between one and two years of duration. Cohabitations of six months or less became even less likely to transition to marriage (moving from about 15% less likely to 25% less likely from Model 1 to Model 3), and cohabitations of 7-12 months became significantly less likely to transition to marriage as well (RRR = 0.85). Cohabitations of longer durations were still less likely to marry as well, but the magnitude of longer durations diminished in effect.

The last two columns present the full model, adding in both socioeconomic and demographic characteristics as well as characteristics of the cohabiting union. In the presence of all the covariates, cohabitation cohort remained a significant predictor of dissolution and marriage. Compared to unions formed in the early 1990s, cohabitations formed after 1995 were increasingly likely to dissolve. Cohabitations formed after 2000 were decreasingly likely to marry; conversely, a cohabiting union formed in the early 1980s was more likely to end in marriage than one formed in the early 1990s. Including various controls, though often

significant in their own right, did little to change the magnitude of the cohort relative risk ratio. As such, Hypothesis 1A is supported, and Hypothesis 1B is rejected. The association between cohabitation outcomes and socioeconomic, demographic, and union characteristics changed little from Models 2 and 3 to Model 4. In the presence of controls for cohabitation characteristics, blacks were more likely to experience dissolution than whites (RRR = 1.17), and women were no longer less likely to marry than men. In the presence of socioeconomic and demographic covariates, there were no differences across cohabitation order in the risk of marriage, though first and third cohabitations remained more likely to dissolve than second cohabitations. The association between engagement and marriage strengthened slightly, and the negative association between children born prior to or during cohabitation and marriage risk diminished somewhat. The association between duration and outcomes did not change.

The above results confirm that cohabiting unions were increasingly unstable and disconnected from marriage over time. However, given some evidence that cohabitations were decreasingly likely to start with plans to marry (Vespa, 2014) combined with the findings here indicating that engagement was the biggest predictor of marriage, I test whether the observed cohort differences mask differences across initial marriage plans (Hypothesis 2). That is, increasing instability and decreasing marital transitions over time may be concentrated among those without marriage plans, to the extent that marriage plans are increasingly selective of those committed to marriage. These analyses are shown in Table 3, which re-runs Model 4 in Table 2 but stratifies by engagement status. Only the relative risk ratios for cohort are included in this table, but the full models are available upon request. These results do not support Hypothesis 2, that the observed changes in cohabiting outcomes over time are concentrated among those without marriage plans. Both the engaged and non-engaged had a higher risk of dissolution and

a lower risk of marriage for cohabitations formed after 2000 relative to those formed in 1990-94. Engaged cohabitations formed after 2005 had a particularly high risk of instability (RRR = 2.27), but Chow tests (not shown) comparing the coefficients across models did not reveal any statistically significant differences between the engaged and non-engaged in the cohort relative risk ratios.

– Table 3 here –

DISCUSSION

Cohabitation has become quite common in the United States in recent decades, as most people will cohabit outside of marriage at some point in their lives. The majority of today's marriages are preceded by cohabitation even as fewer cohabitations are transitioning to marriage (Kennedy & Bumpass, 2008), and marriage rates are declining (CDC/NCHS National Vital Statistics System, 2012). This research examined whether compositional shifts in the socioeconomic and demographic characteristics of individuals in cohabiting unions, along with shifts in the characteristics of unions themselves (in terms of cohabitation order, engagement, and the presence of children), are partly responsible for observed changes in the outcomes of cohabitation over time. In general, I found support that cohabitation is indeed changing over time, as suggested in Hypothesis 1A. Since the late 1990s, the risk of dissolution has increased, with the most pronounced changes occurring for cohabitations formed most recently. The chances of marriage, too, have declined over time, with the earliest unions – those formed in the 1980s – more likely to transition to marriage and those formed since 2000 less likely to transition to marriage. Thus, the shifts in the outcomes of cohabiting unions have been strongest for the most recent cohorts of cohabitators (with less variation across cohabitations formed during the

1980s and early 1990s). In fact, the truncated age structure of the analytical sample means those most at risk of dissolution and least likely to marry are over-represented in the earliest cohorts, which implies that the observed differences across cohorts are underestimated, and thus the increased dissolution risks and decreased marriage risks over time are even greater. The elevated risk of dissolution seems to play particularly big role in changes in cohabiting outcomes over the past few decades, whereas the changes in the risk of marriage have been smaller (but still significant). Although compositional shifts have indeed occurred, neither shifts in the socioeconomic and demographic profile of those in cohabiting unions nor shifts in the characteristics of unions account for the increased instability and declining risks of marriage in later cohorts, as suggested in Hypothesis 1B.

Further, there is no evidence that increasing dissolution and decreasing marriage reflect declines in commitment at the start of cohabiting unions. Contrary to Hypothesis 2, the association between engagement and the outcomes of cohabiting unions does not seem to differ over time. As such, to the extent that engagement at the start of cohabitation is becoming more rare (Vespa, 2014), it is not becoming more selective of those whose unions will be more stable and more likely to transition to marriage, contrary to expectations. Engagement itself, though, remains strongly related to stability and marriage, as seen in other work (Guzzo, 2009).

Together, these findings add further evidence to the delinking of cohabitation and marriage. Marriage is becoming, across the board, a more selective institution – in terms of who marries (and who marries directly), who benefits, and who stays married, among other factors (Lee & Payne, 2010; Kennedy & Ruggles, in press). Marriage rates are at an all-time low (Cruz, 2013). At the same time, cohabitation is on the rise and shows no signs of abating (Manning, 2013), and while many cohabitators enter their unions with plans to marry, a substantial proportion

enter without explicit plans or expectations regarding marriage, often driven by financial and logistical concerns (Sassler, 2004; Smock, Manning, and Porter, 2005). Thus, even as marriage is becoming more selective, cohabitation is becoming less so. The declining selectivity of cohabitation, driven perhaps by a lowering of the “bar” to cohabit as cohabitation becomes increasingly acceptable (Popenoe, 2005; Thornton & Young-deMarco, 2001), likely contributes to the rising instability of cohabiting unions. As suggested at the start of the paper, then, the results here confirm the notion that marriage has become less a part of the cohabitation process over time.

Limitations

There are a number of limitations to keep in mind. First, this paper uses individuals in cohabiting unions as the unit of analysis, not individuals or cohabiting unions themselves. As such, it cannot inform us about changes in individual union formation behavior over time and does not analyze trends in the likelihood of entering different types of unions. Second, the NSFG samples individuals, not cohabitations, so the cohabitations are not necessarily representative of all cohabitations but of the cohabiting unions of individuals aged 15-44 in 2002 and in 2006-2010. To limit the extent to which this affected the analysis, I restricted the sample by age, but this likely still affects generalizability to some degree. In particular, the earliest cohorts are disproportionately comprised of younger adults, who in general exhibit higher union instability and lower chances of marriage (Guzzo, 2009; Tzeng & Mare, 1995). Third, some research suggests that short-term cohabitations are more likely to be under-reported for cohabitations that occurred in periods more distal to the survey than for more recent unions (Hayford & Morgan, 2008). Qualitative evidence also shows that the exact start and end dates of cohabitation are often quite fluid (Manning & Smock, 2005), as is the accuracy of retrospective

reports (Teitler, Reichman, & Koball, 2006). To the extent that retrospective recall issues might favor more well-defined and stable unions, then the results could overstate differences in cohabitation outcomes over time. However, if this were true, we would also expect that there would be more non-engaged cohabitations in recent cohorts, and there is no evidence that is occurring. Fourth, the measure of engagement is not ideal; the phrases “engaged to be married” and “definite plans to marry” are somewhat vague, and it is possible that engagement is subject to recall bias – that those whose relationship is intact are more likely to report their cohabitation as beginning with engagement or definite plans to marry as opposed to those who were engaged being more likely to have an intact relationship.

Conclusion

The compositional shifts of those in cohabiting unions over time reflect the growing diversity of the American population and the shifting role of cohabitation in the family landscape, clearly demonstrating that today’s cohabitations are not the same as those in the past. A growing proportion of cohabitators are likely those for whom dissolution risks are higher and marriage chances are lower – younger adults, those with children from a past union, those in higher-order unions, and so on. As such, it would seem that part of the increase in cohabiting instability and decrease in transitions to marriage is compositional. This study, however, found little evidence that compositional shifts among individuals in cohabiting unions are primarily responsible for changes in outcomes, as cohort differences were found even after accounting for compositional shifts and even among those who reported that when they started living together they planned to marry their cohabiting partner. This suggests that other factors have contributed to increased instability and a weakening of the link between cohabitation and marriage.

Given that the analytical sample contains never-married young adults and that the differences were most pronounced for cohabitations formed since 2000, the results here may reflect the well-documented difficulties today's young men and women are experiencing in the transition to adulthood (Settersten & Ray, 2010). Although the social and economic prerequisites for marriage have increased (Cherlin, 2005), Americans remain pro-marriage, and the majority of never-married men and women want to marry in the future (Manning, Longmore, & Giordano, 2007; Pew Research Center, 2010; Thornton & Young-DeMarco, 2001). These results – that cohabiting unions, even those begun with engagement, are more likely to dissolve and less likely to transition to marriage over time even after accounting for compositional shifts – is all the more troubling because it suggests that young adults are having trouble realizing their desires and intentions to form more permanent and stable unions, particularly marriages. For today's young adults, achieving career and economic stability may be a real barrier to union stability and marriage (Smock, Manning, & Porter, 2005).

Attitudinal changes toward union formation and stability cannot be ruled out either. Today's young adults may simply view cohabitation differently than earlier cohorts. Cohabitations may be increasingly viewed as a matter of convenience and comfort – that is, as a way to be with one's partner and simultaneously minimize economic and logistic costs (Sassler, 2004) – rather than as part of a relationship progression towards marriage. Pressures to marry one's partner, too, may be declining, if the bar for marriage (emotionally, physically, and/or economically) is getting higher, such that people are increasingly likely to think it is better to end a cohabiting union (and an engagement) prior to marriage than to risk marrying and subsequently divorcing. Thus, it seems that cohabitation in the U.S., at least among never-married young adults, remains best characterized as an alternative to being single.

Finally, it is worth mentioning that the increased instability of cohabiting unions is likely responsible, in part, for the fairly stable divorce rate seen since the 1980s (Kennedy & Ruggles, in press). It could be argued that the dissolution of a cohabiting union is, in many ways, an averted divorce, to the extent that in earlier time periods, the same couple would have married directly but experienced the same relationship problems that led to marital demise. If this is the case, then rising instability and the delinking of cohabitation and marriage is not necessarily problematic. Conversely, if many of today's cohabitations are just a variation of formal marriage – involving children, financial commitments, and so on – then rising rates of instability do indeed suggest some sort of large-scale issue impacting today's unions, making more conventional measures of union formation and stability less meaningful (Kennedy & Ruggles, in press).

References

- Bramlett, M. D., & Mosher, W. D. (2002). Cohabitation, marriage, divorce, and remarriage in the United States. *Vital and Health Statistics, Series 23*(22). Hyattsville, MD: National Center for Health Statistics
- Brown, S. L. (2000). Union transitions among cohabitators: The significance of relationship assessments and expectations. *Journal of Marriage and Family, 62*(3), 833-846.
- Brown, S. L., Lee, G. R., & Bulanda, J. R. (2006). Cohabitation among older adults: A national portrait. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences, 61*(2), S71-S79.
- Bumpass, L., & Lu, H. H. (2000). Trends in cohabitation and implications for children's family contexts in the United States. *Population Studies, 54*(1), 29-41.
- CDC/NCHS National Vital Statistics System. (2012). National marriage and divorce rates and trends." http://www.cdc.gov/nchs/nvss/marriage_divorce_tables.htm. Published 1/10/12, accessed 7/17/12.
- Chandra, A., Martinez, G. M., Mosher, W. D., Abma, J. C., & Jones, J. (2005). Fertility, family planning, and reproductive health of US women: data from the 2002 National Survey of Family Growth. *Vital and Health Statistics, Series 23*(25). Hyattsville, MD: National Center for Health Statistics.
- Cherlin, A. J. (2005). American marriage in the early twenty-first century. *The Future of Children, 15*(2), 33-55.
- Cherlin, A. J. (2009). *The Marriage-Go-Round: The State of Marriage and the Family in America Today*. New York: Knopf.
- Cohen, J., & Manning, W. (2010). The relationship context of premarital serial cohabitation. *Social Science Research, 39*(5), 766-776.
- Copen, C. E., Daniels, K., & Mosher, W. D. (2013). First Premarital Cohabitation in the United States: 2006–2010 National Survey of Family Growth." *National Health Statistics Reports*, Number 64. Hyattsville, MD: National Center for Health Statistics.
- Cruz, J. (2013). Marriage: More than a century of change. FP-13-13. National Center for Family & Marriage Research: Bowling Green State University, Bowling Green, OH.
- Edin, K., Kefalas, M. & Reed, J. (2004). A peek inside the black box: What marriage means for poor unmarried parents. *Journal of Marriage and Family, 66*(4), 1007-1014.
- Hayford, S. R., & Morgan, S. P. (2008). The quality of retrospective data on cohabitation. *Demography, 45*(1), 129-141.
- Heuveline, P., & Timberlake, J. M. (2004). The role of cohabitation in family formation: The United States in comparative perspective. *Journal of Marriage and Family, 66*(5), 1214-1230.
- Goodwin, P. Y., Mosher, W. D., & Chandra, A. (2010). Marriage and cohabitation in the United States: A statistical portrait based on cycle 6 (2002) of the National Survey of Family Growth. *Vital and Health Statistics, Series 23*(25). Hyattsville, MD: National Center for Health Statistics.
- Guzzo, K. B. (2006). The relationship between life course events and union formation. *Social Science Research, 35*(2), 384-408.
- Guzzo, K. B. (2009). Marital intentions and the stability of first cohabitations. *Journal of Family Issues, 30*(2), 179-205.

- Johnson, C. A., Stanley, S. M., Glenn, N. D., Amato, P. R., & Nock, S. L., Markman, H. J., & Dion, M. R. (2002). *Marriage in Oklahoma: 2001 Baseline Statewide Survey on Marriage and Divorce*. Oklahoma City, OK: Oklahoma Department of Human Services.
- Kawamura, S. (2009). Median age at first marriage in the U.S., 2008. National Center for Marriage and Family Research Family Profiles FP-09-03. Bowling Green State University (OH).
- Kennedy, S., & Bumpass, L. (2008). Cohabitation and children's living arrangements: New estimates from the United States. *Demographic Research*, *19*, 1663.
- Kennedy, S., & Fitch, C. A. (2012). Measuring cohabitation and family structure in the United States: Assessing the impact of new data from the Current Population Survey. *Demography*, *49*(4), 1479-1498.
- Kennedy, S., & Ruggles, S. (In press). Breaking up is hard to count: The rise of divorce in the United States, 1980-2010. *Demography*.
- Lee, G. L., & Payne, K. K. (2010). Changing marriage patterns since 1970: What's going on, and why? *Journal of Comparative Family Studies*, *41*(4), 537-555.
- Lichter, D. T. (2012). Childbearing among cohabiting women: Race, pregnancy, and union transitions. Pp. 209-219 in Booth, A., Brown, S. L., Landale, N. S., Manning, W. D., & McHale, S. M. (Eds.) *Early Adulthood in a Family Context* New York: Springer.
- Lichter, D. T., Qian, Z., & Mellott, L. M. (2006). Marriage or dissolution? Union transitions among poor cohabiting women. *Demography*, *43*(2), 223-240.
- Lichter, D. T., Turner, R. N., & Sassler, S. (2010). National estimates of the rise in serial cohabitation. *Social Science Research*, *39*(5), 754-765.
- Manning, W. D. (2013). Trends in cohabitation: Over twenty years of change, 1987-2010. National Center for Family and Marriage Research Family Profiles FP-13-12. Bowling Green State University (OH).
- Manning, W. D., & Smock, P. J. (2002). First comes cohabitation and then comes marriage? A research note. *Journal of Family Issues*, *23*(8), 1065-1087.
- Manning, W. D., & Smock, P. J. (2005). Measuring and modeling cohabitation: New perspectives from qualitative data. *Journal of Marriage and Family*, *67*(4), 989-1002.
- Manning, W. D., Longmore, M. A., & Giordano, P. C. (2007). The changing institution of marriage: Adolescents' expectations to cohabit and to marry. *Journal of Marriage and Family*, *69*(3), 559-575.
- Oppenheimer, V. K. (2003). Cohabiting and marriage during young men's career-development process. *Demography*, *40*(1), 127-149.
- Pew Research Center. (2010). *The decline of marriage and the rise of new families*. Washington, D.C.: Pew Research Center.
- Popenoe, D. (2005). *The state of unions 2005: The social health of marriage in America*. Piscataway, NJ: National Marriage Project.
- Raley, R. K. (2000). Recent trends and differentials in marriage and cohabitation: The United States. pp. 19-39 in L.J. Waite (Ed.) *The Ties that Bind: Perspectives on Marriage and Cohabitation*. New York: Aldine de Gruyter.
- Raley, R. K. (2001). Increasing fertility in cohabiting unions: Evidence for the second demographic transition in the United States? *Demography*, *38*(1), 59-66.
- Raley, R. K., Crissey, S., & Muller, C. (2007). Of sex and romance: Late adolescent relationships and young adult union formation. *Journal of Marriage and Family*, *69*(5), 1210-1226.

- Rose-Greenland, F., & Smock, P. J. (2013). Living together unmarried: What do we know about cohabiting families? Pp 255-273 in Peterson, G. W., & Bush, K. R. (Eds.) *Handbook of Marriage and Family*, 3rd edition. New York: Springer.
- Sassler, S. (2004). The process of entering into cohabiting unions. *Journal of Marriage and Family*, 66(2), 491-505.
- Schoen, R., Landale, N. S., & Daniels, K. (2007). Family transitions in young adulthood. *Demography*, 44(4), 807-820.
- Seltzer, J. A. (2004). Cohabitation in the United States and Britain: Demography, kinship, and the future. *Journal of Marriage and Family*, 66(4), 921-928.
- Settersten, Jr., R. A., & Ray, B. (2010). What's going on with young people today? The long and twisting path to adulthood. *The Future of Children*, 20(1), 19-41.
- Smock, P. J. (2000). Cohabitation in the United States: An appraisal of research themes, findings, and implications. *Annual Review of Sociology*, 1-20.
- Smock, P. J., Manning, W. D., & Porter, M. (2005). "Everything's there except money": How money shapes decisions to marry among cohabitators. *Journal of Marriage and Family*, 67(3), 680-696.
- Sweeney, M. (2010). Remarriage and stepfamilies: Strategic sites for family scholarship in the 21st century. *Journal of Marriage and Family*, 72, 667-684.
- Teitler, J. O., Reichman, N. E., & Koball, H. (2006). Contemporaneous versus retrospective reports of cohabitation in the Fragile Families survey. *Journal of Marriage and Family*, 68(2), 469-477.
- Thornton, A., & Young-DeMarco, L. (2001). Four decades of trends in attitudes toward family issues in the United States: The 1960s through the 1990s. *Journal of Marriage and Family*, 63, 1009-1037.
- Tzeng, J. M. & Mare, R. D. (1995). Labor market and socioeconomic effects on marital stability. *Social Science Research*, 24, 329-351.
- Vespa, J. (2014). Historical trends in the marital intentions of one-time and serial cohabitators. *Journal of Marriage and Family*, 76(1), 207-217.
- Vespa, J., & Painter II, M. A. (2011). Cohabitation history, marriage, and wealth accumulation. *Demography*, 48(3), 983-1004.

Figure 1. Dissolution within 36 months, Engaged

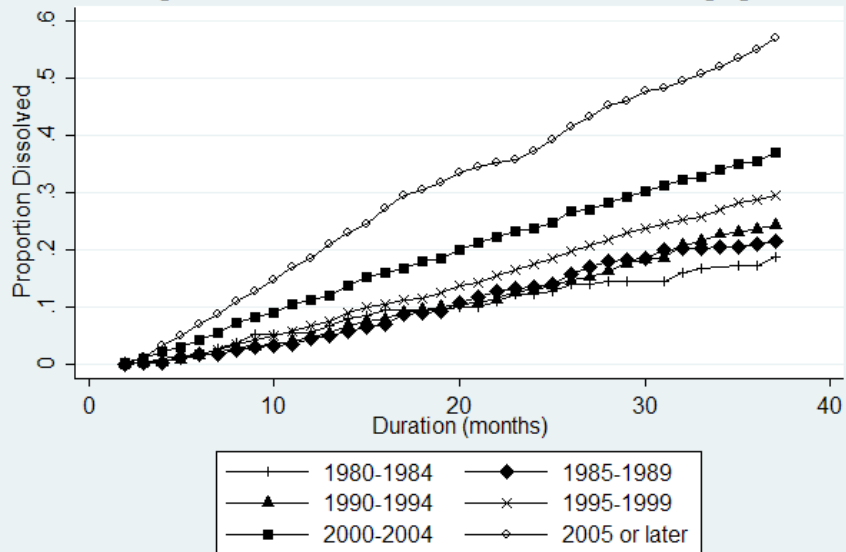


Figure 2. Marriage within 36 months, Engaged

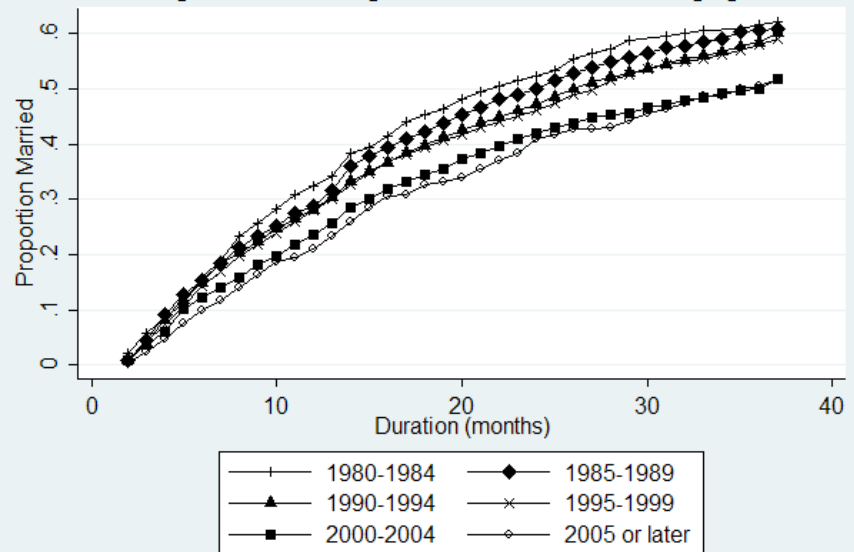


Figure 3. Dissolution within 36 months, Not Engaged

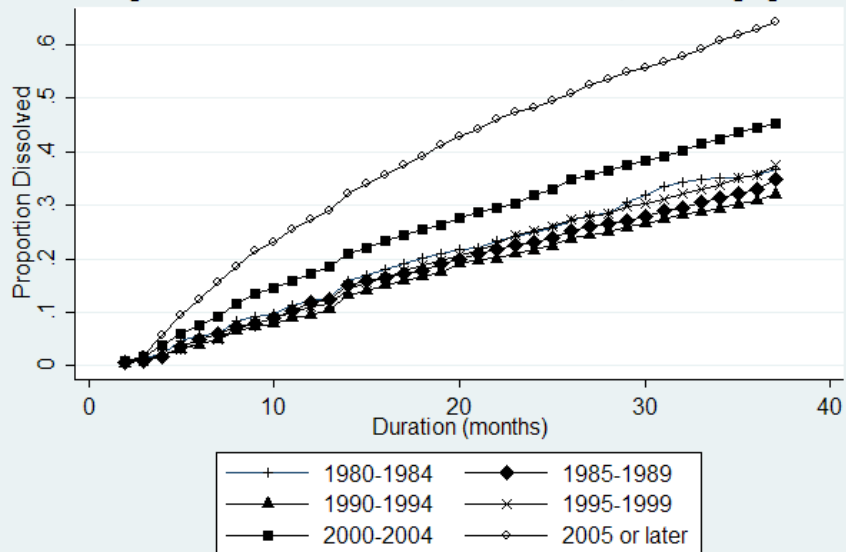


Figure 4. Marriage within 36 months, Not Engaged

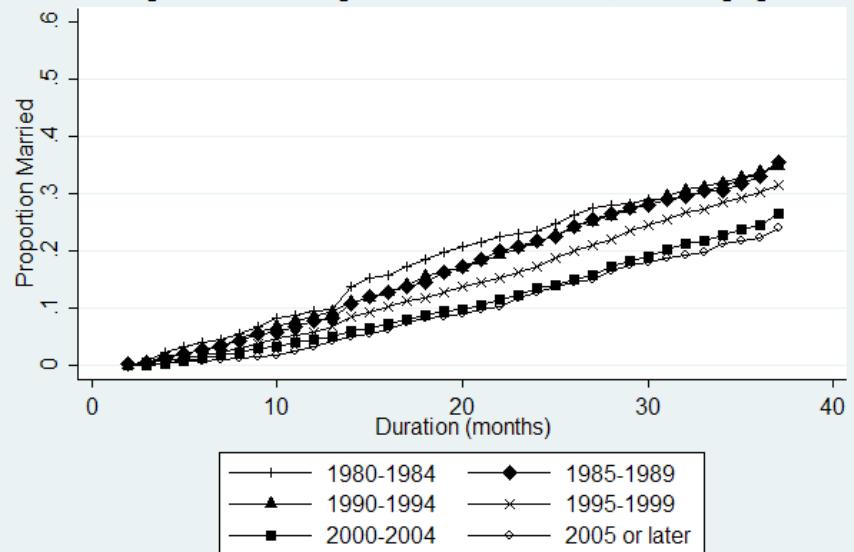


Table 1. Weighted Percentages for the Descriptive Characteristics of Cohabitations Formed 1980-2010 among Never-Married Individuals Aged 18-34 (N=17,890 cohabitations and 13,107 individuals)

	1980-84	1985-89	1990-94	1995-99	2000-04	2005 or later	Total
<i>Socioeconomic & demographic characteristics</i>							
Age group							
18-19	37.1	25.3	18.4	18.6	18.0	18.9	20.7
20-24	58.2	52.0	47.9	40.2	44.8	42.2	45.9
25-29	4.7	21.1	24.4	26.2	22.5	28.4	23.0
30-34	0.0	1.6	9.4	15.1	14.7	10.5	10.4
Female	48.9	52.1	53.5	51.8	51.4	48.1	51.5
Race-Ethnicity-Nativity							
non-Hispanic white	71.1	70.5	69.9	64.3	63.7	61.6	66.4
non-Hispanic black	11.3	13.5	12.7	14.0	14.1	15.5	13.6
Native-born Hispanic	4.4	4.9	5.9	7.8	8.2	10.2	7.1
Foreign-born Hispanic	6.1	6.2	6.7	7.3	8.2	6.9	7.1
Other	7.2	4.9	4.7	6.7	5.9	5.7	5.8
High school grad at start	72.1	73.4	74.8	73.7	73.5	72.1	73.6
Mother's education							
Less than HS/missing	26.4	26.8	22.9	21.9	20.6	18.5	22.5
High school	44.8	43.8	42.2	38.0	35.4	34.1	39.2
Some college	15.7	15.8	19.0	21.9	24.9	27.3	21.2
College or more	13.2	13.6	15.9	18.2	19.1	20.1	17.1
Mother had teen birth	16.6	16.7	16.7	16.5	15.0	15.1	16.1
Family structure at age 14							
Both biological parents	71.2	68.5	57.2	63.3	61.3	56.0	64.2
Stepfamily	9.8	10.4	11.6	12.5	12.6	13.2	11.9
Other	19.0	21.2	21.3	24.2	26.1	30.8	23.4
<i>Union/family characteristics</i>							
Cohabitation order							
1 st cohabitation	88.0	80.0	74.0	69.0	70.0	66.5	72.9
2 nd cohabitation	10.3	16.5	21.4	23.5	24.1	28.5	21.8
3 rd or higher cohabitation	1.7	3.5	4.6	7.5	5.8	5.0	5.3
Engaged	40.2	45.5	40.9	42.5	39.8	40.3	41.6
Any children born prior to cohabitation	2.9	6.6	7.8	12.1	15.3	19.1	11.2
Had child while cohabiting	17.1	19.2	20.4	21.6	19.1	14.2	19.4
N	831	2,034	3,473	4,576	4,295	2,681	17,890

Table 2. Relative Risk Ratios from Multinomial Logistic Regression of Cohabitation Outcomes among Never-Married Adults Aged 18-34

	Model 1		Model 2		Model 3		Model 4	
	Dissolve v. Intact	Married v. Intact	Dissolve v. Intact	Married v. Intact	Dissolve v. Intact	Married v. Intact	Dissolve v. Intact	Married v. Intact
Cohort								
1980-84	1.23 *	1.12	1.12	1.27 **	1.19 †	1.20 †	1.10	1.28 **
1985-89	1.07	1.07	1.04	1.13 *	1.08	1.08	1.05	1.08
1990-94	--	--	--	--	--	--	--	--
1995-99	1.13 *	0.98	1.14 *	0.99	1.16 *	0.99	1.15 *	0.99
2000-04	1.49 ***	0.82 ***	1.48 ***	0.84 ***	1.53 ***	0.83 ***	1.50 ***	0.84 **
2005 or later	1.87 ***	0.69 ***	1.85 ***	0.70 ***	1.94 ***	0.70 ***	1.89 ***	0.69 **
<i>Socioeconomic & demographic characteristics</i>								
Age group								
18-19			1.55 ***	0.64 ***			1.52 ***	0.64 ***
20-24			1.36 ***	0.80 ***			1.35 ***	0.80 ***
25-29			--	--			--	--
30-34			0.96	0.91			0.95	0.97
Female			0.99	0.93 *			0.98	0.95
Race-Ethnicity-Nativity								
non-Hispanic white			--	--			--	--
non-Hispanic black			1.08	0.56 ***			1.17 **	0.51 ***
Native-born Hispanic			0.92	0.62 ***			0.98	0.60 ***
Foreign-born Hispanic			0.41 ***	0.58 ***			0.45 ***	0.53 ***
Other			0.88	0.77 *			0.91	0.75 ***
High school grad			1.01	1.40 ***			0.99	1.35 ***
Mother's education								
Less than HS/missing			0.93	1.03			0.93	1.00
High school			--	--			--	--
Some college			1.18 ***	1.07			1.16 **	1.06
College or more			1.23 ***	1.03			1.18 **	1.09
Mother had teen birth			1.01	0.95			0.99	0.99
Family structure at age 14								
Both biological parents			--	--			--	--
Stepfamily			1.01	0.91			1.01	0.92
Other			1.03	0.79 ***			1.02	0.85 ***
<i>Union/family characteristics</i>								
Cohabitation order								
1 st cohabitation					1.38 ***	0.86 ***	1.27 ***	0.94
2 nd cohabitation					--	--	--	--
3 rd or higher cohabitation					1.41 ***	0.99	1.49 ***	0.96
Engaged					0.59 ***	2.34 ***	0.61 ***	2.47 ***
Any children born prior to cohabitation					1.00	0.61 ***	1.09	0.74 ***
Had child while cohabiting					0.72 ***	0.57 ***	0.79 ***	0.79 ***

Duration																	
	6 months or less	0.82	**	0.84	*	0.81	***	0.81	***	0.80	*	0.74	***	0.81	***	0.73	***
	7-12 months	0.96		0.92		0.96		0.89	†	0.95		0.85	**	0.95		0.84	**
	13-24 months	--		--		--		--		--		--		--		--	
	25-48 months	0.87	*	0.78	**	0.89	*	0.82	***	0.91	†	0.86	**	0.91	†	0.87	*
	49 or more months	0.65	***	0.43	***	0.73	***	0.51	***	0.74	***	0.54	***	0.78	***	0.57	***
Constant		0.01	***	0.02	***	0.01	***	0.03	***	0.01	***	.02	***	0.09	***	0.02	***
Person-months																	
Cohabitations																	

†p≤.10 p* p≤.05 **p≤.01 *** p≤.001

Table 3. Relative Risk Ratios from Multinomial Logistic Regression of Cohabitation Outcomes among Never-Married Adults Aged 18-34, Disaggregated by Engagement Status

		Engaged		Not engaged	
		Dissolve v. Intact	Married v. Intact	Dissolve v. Intact	Married v. Intact
Cohort					
	1980-84	0.82	1.36 ***	1.17	1.21
	1985-89	0.88	1.14 †	1.10	1.07
	1990-94	--	--	--	--
	1995-99	1.16	1.04	1.15 †	0.95
	2000-04	1.43 *	0.89 †	1.52 ***	0.76 ***
	2005 or later	2.27 ***	0.70 ***	1.76 ***	0.69 **
Constant		0.01 ***	0.04 ***	0.01 ***	0.03 ***
Person-months		198963		342099	
Cohabitations		7215		10675	

†p≤.10 * p≤.05 p≤.01 p≤.001

Models control for age, gender, race-ethnicity-nativity, high school education, mother's education, mother had a teen birth, family structure at age 14, cohabitation order, children born prior to cohabitation, children born during cohabitation, and duration.