EVEN MORE 'PREMARITAL DIVORCE': COHABITATION AND MULTIPLE UNION
DISSOLUTIONS DURING YOUNG ADULTHOOD

Kasey J. Eickmeyer

A Thesis

Submitted to the Graduate College of Bowling Green
State University in partial fulfillment of
the requirements for the degree of

MASTER OF ARTS

August 2016

Committee:

Wendy Manning, Advisor

Karen Benjamin Guzzo

Kara Joyner

ABSTRACT

Wendy Manning, Advisor

The union formation and dissolution patterns of young adult women have changed dramatically over the last two and a half decades. Women are marrying later and divorce rates are on the decline, yet cohabitation is more common and increasingly unstable (Anderson and Payne, 2014; Manning, 2013; Manning, Brown, and Payne, 2014; Brown, Lin, and Payne, 2014; Clarke, 1995; Guzzo 2014). These trends mean that we must consider experiences of union dissolution during young adulthood in terms of cohabitation as well as marriage. Using the National Survey of Family Growth Cycle 5 (1995), Cycle 6 (2002), and continuous surveys 2006-2013, I examine the influence of three birth cohorts (Millennials, Generation X, and Baby Boomers) and union experience on women's likelihood and frequency of union dissolution during young adulthood (ages 18-26) using a collective measure of both marital and non-marital experiences. It appears that relationships have become far more unstable for Millennials than they were for Baby Boomers or Generation X. The number of union dissolutions experienced during young adulthood has increased over time, with Millennials experiencing a higher likelihood of ever dissolving a union during young adulthood compared to earlier generations of women and a higher level of instability compared to Generation X. Cohabitation appears to play a role in driving these patterns of instability. This research illustrates that not only are Millennial women facing higher odds of multiple co-residential dissolutions – marital or non-marital—during young adulthood, but that cohabitation experience contributes to this instability, lending to potentially more 'demographic density' (Rindfuss, 1991) during young adulthood than ever before.

ACKNOWLEDGEMENTS

I would first like to thank my advisor, Wendy Manning, for her instrumental support and instruction through the thesis writing process and my academic career. I have been shaped into a better student, writer, and researcher with Dr. Manning as my guide. She provides a powerful demonstration of scholarship and kindness, and I am overwhelmingly grateful for the opportunities she has provided for me to improve and grow along my way. I would next like to thank Karen Benjamin Guzzo and Kara Joyner, who make up my thesis committee, as they have not only provided beneficial comments on my thesis, but have enabled me to become a more critical and thoughtful sociologist. The Center for Family and Demographic Research and the National Center for Family and Marriage Research deserve acknowledgements for the incredible experience and research support I have had during my time as a research assistant. Finally, I would like to thank my complex and beautiful web of family and friends for their advice and support through the writing process, especially my two precocious nephews, the thought of whom inspires me to become a better person for their future.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

INTRODUCTION

The patterns of young adults' union formation and dissolution have shifted dramatically over the past twenty-five years. The age at first marriage continues to rise, so much that the median age that women marry is now 27.9, almost six years later than it was in 1985 (Anderson and Payne, 2016; Vespa, 2014). While young women may be delaying marriage more than ever, the age at cohabitation has stayed about the same at age 22 (Manning, Brown, and Payne, 2014). This time between first cohabitation and marriage represents an opportunity for women to experience multiple co-residential partnerships, and those that have ever cohabited increasingly do have multiple cohabitations. In the 1980s, about 7% of cohabitors had serially cohabited (cohabited with more than one partner). In 2002, this number had more than doubled to nearly one-quarter of cohabitors (Bumpass and Lu 2000; Lichter, Turner, and Sassler, 2010).

Shifts in union formation patterns are paired with shifts in union dissolution. In terms of divorce, rates declined between 1980 and 2012 by almost 20% among young women (under age 25) (Brown, Lin, and Payne, 2014; Clarke, 1995). During the same time period cohabiting unions have increased their dissolution rate by 20% (Guzzo 2014; Lamidi, Manning, and Brown, 2015). These cohabitation dissolutions may replace marital dissolutions and have been termed "premarital divorces" (Bumpass, 1990; Raley and Bumpass, 2003). Using the Cycle 5 (1995), Cycle 6 (2002), 2006-2010, and 2011-2013 National Survey of Family Growth (NSFG), this study examines birth cohort trends in union dissolution among Millennials (born 1981-1995), Baby Boomers (born 1950-1964), and Generation X (born 1965-1980). I contribute to research on union instability in four key ways. First, I determine whether there are birth cohort differences in dissolution, and second, I explore whether cohabitation explains the association between birth cohort and higher frequencies of dissolution among Millennials. Third, I examine these

differences in the presence of demographic, socioeconomic, family background, or relationship characteristics associated with relationship stability in order to determine whether birth-cohort differences persist. Fourth, I return to the role of cohabitation to examine whether the birth-cohort influence on the frequency of dissolution is dependent on whether women cohabited during young adulthood.

BACKGROUND

Young Adulthood

Behavioral shifts, like the delay in marriage, have contributed to an important developmental stage between the late teens and early twenties. Young adulthood is characterized by identity development and exploration, and the experiences gained during this life stage have a lasting impact on romantic arrangements. It is a period of time in which individuals can figure out what kind of partner they desire, and what kind of partner they desire to be, as they mature and these relationships become more salient (Arnett, 2000). Young adults pursue romantic relationships that are more serious and longer lasting than those during adolescence, but are not particularly committing to marriage (Arnett, 2000). Indeed, Arnett (2006) brands young adulthood an "age of instability" (p. 9), which suggests that their exploratory romantic relationships may be subject to a higher risk of dissolution than relationships formed later in the life course. Young adulthood is not homogenous over time: it takes shape with the characteristics of the era (Settersten and Ray, 2010). This heterogeneity, paired with the growing uncertainty during this life stage (Settersten, 2012) implies that the experiences of relationship dissolution during young adulthood for Millennial women are likely different from earlier generations of the Baby Boomers and Generation X.

Elder defines the life course perspective as "the notion that changing lives alter developmental trajectories" (Elder, 1998: 1). This perspective allows researchers to consider that individual lives are a part of something much bigger, existing within structural, historical, and social boundaries. The life course perspective outlines four tenants, two of which are the tenants of historical time and place and life stage timing, which guide this research. Historical time and place asserts that individual's lives are shaped by the time in which they exist, and the events

going on around them (Elder, 1998). I apply this tenant to my research questions by considering the possibility that birth cohorts will have different patterns of union dissolution. Life stage timing contends that *when* events or transitions happen can shape later outcomes, so I examine union dissolution during young adulthood specifically in order to form a greater understanding of one strand of the 'demographic density' (Rindfuss, 1991) of this life stage and the possibility of later life implications.

Changes in Marriage and Divorce

Family scholars have indicated that there has been an overall retreat from marriage characterized not only by declining rates of marriage, but a delay in the timing of first marriage (Cherlin, 2004; Kennedy and Ruggles, 2014; Lamidi, 2015a; Manning et al., 2014). The share of women marrying has declined overall since the 1980s from 73% to 60%, and this decline is most concentrated among women ages 18-29 – Millennials (Lamidi, 2015a). Among women ages 18-24, the share of women ever married by that age dropped from 29% to 14% between 1989 and 2014. Among women ages 25-29, the share of women ever married was reduced by 25% from 71%-- a majority—to 46%-- a minority (Lamidi, 2015a). In addition, women also experienced a consistently rising age at first marriage, topping out at 27.9 in 2014 (Anderson and Payne, 2014). This historically high age at first marriage is a part of a four-decade growth often attributed to extended education, expanding women's labor force participation, and rising incidence of premarital cohabitation (Lundberg and Pollak, 2013). These trends, paired with the uptick in the share of women who remain unmarried, suggest that young women are increasingly taking a rain check on marriage until they are almost out of their twenties, a time which used to be characterized by entrance into a first marriage, and may potentially forego marriage more than ever (Anderson and Payne, 2016; Lamidi, 2015a; Muraco and Curran, 2012).

The retreat from marriage is historically characterized by increased marital instability, but recent trends in divorce have indicated an overall decline or stall in divorce rates among younger adults (Kennedy and Ruggles, 2014). In the 1980s, almost half of all divorces were concentrated between the ages of 20-24, yet the divorce rate for women ages 15-24 dropped by 43% between 1990 and 2012 (Brown, Lin, and Payne, 2014; Clark, 1995). This can be partially attributed to the rising age at first marriage and the profile of those who delay marriage. That is, those who wait longer to marry tend to be those who are the least at-risk for divorce (Cherlin, 2010). Recent research also indicates that the rising age at first marriage may be significantly related to the decline in divorce over time (Rotz, 2015). There is also a socio-economic gradient in divorce, especially in terms of education: a far smaller proportion of college graduates are currently divorced compared to all other education groups (Lundberg, Pollak, and Stearns, 2016). Importantly, the share of women earning a college degree has tripled over the past forty years (Diprete and Buchmann, 2013). Divorce among young adult women, then, may be on the decline as young women delay marriage and the share of women in their mid- to late- twenties earning a Bachelor's degree or higher continues to rise.

Trends in Cohabitation

Cohabitation is arguably a common experience among women during young adulthood. The share of unions reported as cohabitations increased by 56% between the late 1980s and 2013 (Manning and Stykes, 2015). A clear majority of first unions (74%) are cohabitations, and despite the mounting trends in postmarital cohabitation, more cohabiting unions take place between never-married individuals (Lamidi, 2015b; Manning et al., 2014). Overall, an estimated three-quarters of young adults have ever lived with a partner, and most marriages are preceded

by cohabitation (Manning and Stykes, 2015). This suggests, then, that cohabitation is common during the young adult years.

Even though cohabitation is more common, cohabiting unions are more likely to end in dissolution today than twenty-five years ago (Lamidi et al., 2015). Recent unions are unstable and short-lived (Guzzo, 2014). Cohabitations in young adulthood last, on average, 29 months (nearly two and a half years) (Lamidi et al., 2015), which is slightly longer than unions in the 1980s (18 months on average) (Bumpass and Lu, 2000). While a substantial share (40%) of cohabitors believe that they will marry their partner, only 33% of recent premarital cohabitors marry their partner by the fifth year of their cohabiting relationship compared to 57% in the 1980s (Lamidi et al., 2015).

An implication of this increased risk of dissolution is an opportunity for young adults to re-partner following a breakup. Young adulthood is characterized by romantic exploration, but not necessarily settling down, which may create an environment in which young women consistently partner (Arnett, 2000). In addition, cohabitors are progressively choosing to cohabit again following the dissolution of their first cohabiting union. Overall, the proportion of serial cohabitors has increased by 80% between the 1980s and 2010s, and research indicates that the proportion of women serially cohabiting has not leveled off or declined, but continues to grow among younger cohorts of women (Bumpass and Lu, 2000; Cohen and Manning, 2010; Lichter, Turner, and Sassler, 2010; Vespa, 2014). The context of young adulthood paired with the increasing share of women serially cohabiting, then, may imply that young women are experiencing more union dissolutions now than they have in the past, as serial cohabitation logically assumes at least one cohabitation dissolution.

Relationships in young adulthood, therefore, are increasingly complex in both their duration and accompanying experiences, even before the entry into marriage. Increasing relationship instability indicates more opportunities for young adults to accumulate unique relationship experiences, such as having a child before dissolving a cohabiting union or experiencing multiple residential unions, before their first marriage (Payne, 2011; Lichter et al., 2010). These relationship experiences are anticipated to be consequential as they move in and out of relationships, with a new partner or old, and these experiences accumulate. Relationship experiences may contribute to negative patterns of relationship functioning, acting as relationship "baggage". Relationship baggage may lead to instability in subsequent relationships as it interferes with building and maintaining intimate ties (Young, Furman, and Laursen, 2011). However, relationship experiences may contribute to relationship "competence" as young adults learn the ins and outs of committed relationships and bring knowledge of positive relationship functioning into subsequent relationships, and it is related to increased relationship satisfaction (Young et al., 2011).

Correlates of Union Instability

Apart from the influence of birth cohort and cohabitation, there are many possible correlates of union instability. Including key indicators of union instability is important to account for potential selection into trajectories of instability, and these factors fall into three categories: demographic and socioeconomic indicators, family background, and relationship characteristics. Trends in union instability may follow a pattern of "diverging destinies" (McLanahan, 2004), as prior research demonstrates not just racial and ethnic differences in union stability but also an education gradient. Black women have consistently higher divorce rates than White and Hispanic women as well as a higher likelihood of dissolving a first cohabitation by

five years compared to White women (Lamidi et al., 2015; Raley, Sweeney and Wondra, 2015).

In terms of education, research indicates that women with a college degree have more stable

unions than women without (Lundberg et al., 2016; Lyngstad and Jalovaara, 2010; Musick and

Michelmore, 2015). Therefore, I control for race and ethnicity and the highest achieved level of

education to assess these demographic or socioeconomic selection effects.

Prior studies indicate that women's childhood backgrounds play a crucial role in the

stability of their relationships. Children who have experienced their parents' divorce or lived

apart from a two-parent family have a heightened risk of marital instability (Amato, 1996;

Lyngstad and Jalovaara, 2010; Teachman, 2002). This is considered the "intergenerational

transmission" of union instability (McLanahan, 2004), and there are family characteristics which

may increase the risk of experiencing parents' relationship instability as a child, such as early

maternal childbearing (McLanahan, 2004). Conversely, a family background characterized by

socioeconomic advantage is associated with a decreased risk of divorce (Lyngstad and Jalovaara,

2010). To assess the influence of childhood background characteristics, I control for whether the

respondent was raised by two biological or adoptive parents, whether their mother had a teenage

birth, and their mother's education as a proxy for socioeconomic status.

Of course, union stability may be related to characteristics of union formation itself. The

age at which women form their unions is an indicator of stability: an early age at first marriage or

cohabitation is related to an increased likelihood of dissolution (Amato, 1996; Lamidi et al.,

2015). Women's childbearing patterns relative to their unions are also indicative of stability, and

women who bear children prior to marriage are more likely to divorce (Amato, 2010). Women

who have a birth before cohabiting for the first time are also at-risk of dissolving their union

(Guzzo, 2016; Lamidi et al., 2015). To account for these union influences, I include controls for

the age at which women formed their first union and whether they had an un-partnered birth before their first union.

THE CURRENT STUDY

The current study draws on the life course perspective to examine four research questions concerning union dissolution among young adult women. First, what are the union and dissolution experiences of Millennials, Baby Boomers, and Generation X during young adulthood (age 18-26), and how do these experiences differ across birth cohorts? I expect Millennials will experience a greater likelihood of union dissolution compared to Baby Boomers and Generation X as well as a greater number of dissolutions during this life stage. Second, I explore whether cohabitation explains the birth-cohort influence on higher frequencies of dissolution among Millennials. I expect to observe a birth cohort-based gradient in relationship dissolutions prior to age twenty-seven with Millennials experiencing more cohabitation dissolution and less divorce than prior cohorts, but more dissolution overall; Baby Boomers experiencing more divorce and the lowest chances of cohabitation dissolution compared to subsequent generations; and Generation X acting as a transition generation. Finally, I examine these differences in the presence of demographic, socioeconomic, family background, or relationship characteristics associated with relationship stability in order to determine whether birth-cohort differences persist. As the composition of young adults has shifted over time, I expect that demographic characteristics and socioeconomic circumstances, family background, and relationship characteristics may explain birth-cohort differences in union instability. Finally, I return to the role of cohabitation to examine whether the birth-cohort influence on the frequency of dissolution prior to age twenty-seven is dependent on whether women cohabited during this time. I expect that the instability of Millennial women's young adult unions compared to previous generations will be dependent on having ever cohabited during young adulthood.

DATA AND METHODS

The National Survey of Family Growth (NSFG) is designed by the National Center for Health Statistics (NCHS), and has been conducted since 1973. The aim of the survey is to capture details about family, fertility, marriage, contraceptive use, and overall health of the non-institutionalized American population ages 15-44. Cycle 5 (1995) of the NSFG completed 10,847 interviews with women, and included an oversample of Black and Hispanic women. Cycle 6, conducted in 2002, interviewed 12,571 respondents and included an oversample of Black and Hispanic women, consistent with Cycle 5. The 2006-2010 continuous NSFG included interviews with 12,279 women, including an oversampling of Blacks and Hispanics, and women ages 15-24. The 2011-2013 NSFG contained interviews with 7,643 women and also had an oversampling of Blacks and Hispanics. Both continuous surveys had a response rate of 79%. Only female respondents will be included in this analysis due to the lack of male respondents in Cycle 5, and the discordant cohabitation history questions between male and female respondents in the continuous surveys of the NSFG.

The NSFG is well suited for these research questions because it includes detailed retrospective reports regarding marriage and cohabitation, including start and end dates for up to four marriages and premarital cohabitations, four non-marital cohabitations, and if applicable the current cohabiting union. The use of Cycle 5, conducted in 1995, Cycle 6, conducted in 2002, and continuous 2006-2010 and 2011-2013 NSFG allow analyses of social change for Baby Boomers (born 1950-1964), Generation X (born 1965-1980), and Millennials (born 1981-1995).

Analytic Sample

To build my analytic sample, I constructed generational birth cohorts using the respondent's century-month birthdate and eliminated all cases that were not born in years

corresponding to the Baby Boomer, Generation X, or Millennial generations. I started with 36,370 cases and removed the 319 respondents who were not born in my generations of interest, resulting in a sample of 36,051. Young adulthood is often defined as between the ages of 18-25 or 18-29. To maximize the utility of the NSFG data and include all three generations of women, I define young adulthood as between the ages of 18-26. To allow for the completion of young adulthood and complete retrospective union experiences during this life stage, women must be at least twenty-seven at the time of the interview. This limitation excludes 14,051 respondents, resulting in a final sample size of 22,000. Within this sample, there were 1,462 respondents in the Millennial generation, 12,242 in Generation X, and 8,296 in the Baby Boomer generation. From this sample of 22,000 women, I gathered a sample of women who had ever been in a union during young adulthood and were thus at-risk for the dissolution of one or more unions. If a woman reported ever marrying or ever cohabiting between ages 18-26, she was included in this sample (N = 15,984). Of women who had ever had a union, there were 1,140 Millennials, 8,865 Generation X, and 5,979 Baby Boomers.

Figure 1 indicates the age distribution of each birth cohort at the time of the interview, which allows us to speculate when each birth cohort of women would have experienced union dissolutions if they formed their unions before age twenty-seven. The age limit for the NSFG is 45 years old. Baby Boomer women are, at their youngest, age 30 at the 1995 interview. Women from Generation X are as young as age 30, and Millennial women were not old enough to be included in this interview year. In 2002, the youngest Baby Boomer women surveyed are age 37 compared to Generation X women who were ten years younger (27 years old). Between interview years 2006-2010, Baby Boomer women are, at their youngest, age 42 compared to Generation X and Millennial women who are age 27. At the time of the 2011-2013 NSFG, Baby

Boomer women had aged out of the survey. These age ranges allow us to speculate that Baby Boomer women can form unions during young adulthood between the years of 1968 and 1991; Generation X, between the years of 1983 and 2009; and Millennials, between the years of 1999 and 2012.

Dependent Variables

The dependent variable for the first set of analyses is whether the respondent has dissolved any union during young adulthood. This is indicated by a dichotomous variable coded 1 if the respondent experienced any divorce or any cohabitation dissolution and 0 if otherwise. For the analysis of the amount of instability, the dependent variable is coded as: none (0), one union dissolution (1), or two or more union dissolutions (2). This is a collapsed version of the number of dissolutions, which ranged from 0 to 6. Almost all, 98%, of respondents had experienced none, one, or two union dissolutions, with the remainder collapsed into the last category of two or more.

Independent Variables

Generational cohorts are constructed as a categorical variable using the respondent's birth date and age. If a respondent reported a birth date between 1946 and 1964, they are coded as Baby Boomers. If they reported a birth date between 1965 and 1980 they are coded as Generation X. Finally, if a respondent reported a birth date between 1981 and 1995, they are coded as Millennials. The age distribution of the NSFG and the life stage of interest (young adulthood) result in truncated birth cohorts for Baby Boomers and Millennials: birth years spanned from 1950-1964 for Baby Boomers and 1981-1988 for Millennials. The reference group for my analysis is 1981-1988 (Millennials). Figure 1 illustrates the survey age distribution across survey waves by cohort in order to describe the distribution of the data as a whole.

The focal variable is union experience and will determine whether cohabitation is driving the cohort differentials in union dissolution. *Union type* is indicated by a dichotomous variable indicating whether the respondent has *ever cohabited* (1) or *never cohabited* (0). Never cohabited is the reference category.

Two indicators of socioeconomic status are included in this study. *Race and ethnicity* are based on a direct question of whether the respondent identified as Hispanic, Latina, or of Spanish origin. Those who answered affirmatively were coded as Hispanic. Those who did not identify as Hispanic and identified their race were coded as non-Hispanic White, non-Hispanic Black, or non-Hispanic Other. The reference group for race and ethnicity is non-Hispanic White women. Respondent's *highest level of completed education at the time of the interview* is coded into the four same categories and constructed as a categorical variable with a high school diploma or GED as the reference category.

The NSFG provides information regarding *family structure* by asking whether the respondent lived with two biological or adoptive parents from birth to age 18, and this variable is coded 1 for a two parent family structure and 0 for otherwise. For my analysis, the reference category is any family other than a two-parent family. Whether the respondent's mother had a *teen birth* is indicated by the age of their female parent at first birth. If they estimate their mother's age as less than 18 when she had her first birth, the variable is coded as having a teen birth (1), and coded 0 otherwise. No teen birth serves as the reference category. *Mother's education* is indicated by four categories: (a) less than high school, (b) high school diploma or GED, (c) some college, associate's degree, (d) bachelor's degree or higher. This variable is coded as a categorical variable with a high school diploma or GED as the reference category.

The characteristics of the union include age at first union and birth status. The respondent's *age at first union* is a continuous variable constructed from their age at first cohabitation or their age at first marriage. First, cohabitations and marriages were ordered by century-month dates to define which union was the first for the respondent. After identifying the first union, *age at first union* was constructed by calculating the respondent's age at either their first marriage or first cohabitation using corresponding century-month start dates and the century-month of the respondent's birth.

Whether the respondent had an un-partnered birth before their first union is indicated by the timing of births relative to the date of entering their first union (marriage or cohabitation). This is constructed as a dichotomous indicator coded 1 for having a birth prior to the first union and 0 for not having a birth prior to their first union or not having a birth, with the latter category as the reference group.

Analysis plan

First, I will present descriptive statistics detailing the distribution of all the independent variables used in the analysis. Next, I will describe the frequencies of dissolution according to birth cohort. To assess whether Millennials experience a greater likelihood of ever dissolving a union during young adulthood, I employ multivariate analyses to estimate zero-order and full logistic regression models with cohort as the focal independent variable. The next set of models compares the frequencies of dissolution between generations and explores the influence of cohabitation, whether demographic, socioeconomic, family background, or union characteristics explain the influence of birth cohort and whether the association between birth cohort and instability varies by union status. I model my data as the amount of instability ranging from none (0), one dissolution (1), and two or more dissolutions (2) using an ordered logistic regression

model, or a non-linear probability model. Tests of the proportional odds assumption indicate that the assumption is not violated, and that the ordered logistic model is an appropriate model for these data.[1] The first model presents the zero-order association between birth cohort and instability, and the second model includes cohabitation experience. The third model accounts for demographic and socioeconomic factors, family background, and union characteristics. The fourth model includes an interaction between cohabitation experience and birth cohort, with never cohabiting as the reference group.

---

[1] I explored using several types of analysis including OLS regression, multinomial logistic regression, tobit regression, negative binomial logistic regression and zero-inflated negative binomial logistic regression, but the dispersion, skewness, and assumptions of the data indicate that ordered logistic regression is the best fit.

RESULTS

Descriptive statistics

Table 1 presents the percentages and means, where appropriate, of the variables used in the multivariate analysis. The distribution of these characteristics demonstrates a shift in the composition of young adult women who have ever been in a union across birth cohorts. The sample is predominantly White across all generations, but there is an increase in the proportion of women of Hispanic ethnicity from 9.7% among Baby Boomers to 16.4% among Generation X and 19.9% among Millennials. Women experienced a shift toward higher education, with almost 60% of Generation X and 62% of Millennials having at least some college education compared to approximately 50% of Baby Boomers. The share of women who grew up with two parents declined over time by 16%. The trend in mother's education reflects higher educational attainment, with more mothers of Millennials achieving some college education or higher than mothers of Baby Boomers or Generation X. Women formed their union at approximately the same ages over birth cohorts, hovering around 20 years old. The share of women who had experienced a birth before their first union rose from 18.2% among Baby Boomers and peaked for Generation X at 20.0%, but declined to 13.7% among Millennials.

Multivariate analysis

The first research goal is to determine birth-cohort trends in union dissolution experiences prior to the age of twenty-seven and examine how these experiences differ across birth cohorts. Results from Table 2 indicate that, among all women, less than one-fifth of Baby Boomers (18.5%) and one quarter of Generation X (23.5%), had dissolved a union prior to age twenty-seven. In contrast,,1 in 3 Millennials (34.4%) had experienced the dissolution of a union during young adulthood. Limiting the analysis to women who are at risk of dissolving a union

(women who had been in a union during young adulthood), results in a similar the cohort gradient. Almost one-quarter of Baby Boomers (24.7%) and less than one-third of Generation X (30.3%) women who had ever been in union prior to age twenty-seven had dissolved a union, while two-fifths (42.1%) of Millennial women who had entered a co-residential relationship had experienced the end of a union during young adulthood. The *frequency* of instability (or number of dissolutions) also increased, almost doubling across cohorts. 4.4% of Baby Boomers dissolved more than one union, 6.1% of Generation X, and 10.7% of Millennials.

More specific analyses based on marital and cohabitation experience indicates that among women who ever married during young adulthood, the share that had experienced a divorce before the age of twenty-six increased from 14.9% for Baby Boomers to just over 15% of those Millennials. Of particular note is that 62.1% of Baby Boomers had married prior to age twenty-seven, and 45.6% of Millennials (results not shown). The cohort trend in dissolution among cohabitors is slightly more dramatic: the share of cohabitors ever experiencing dissolution increased from 28.44% among Baby Boomers to 42.49% among Millennials. Among Baby Boomers, 47.7% had cohabited prior to age twenty-seven compared to 81.6% of Millennials (Table 1). The composition of dissolution has also shifted across cohorts. Further analyses shows that the share of women only experiencing cohabiting dissolutions during young adulthood increased steadily across birth cohorts from 11.8% among Baby Boomers, 20.8% among Generation X, to 32.4% among Millennials. At the same time, the share only experiencing a marital dissolution decreased from 11.2% among Baby Boomers to 7.3% among Millennials.

My first research goal also considers the likelihood of dissolution and level of dissolution across cohorts prior to age twenty-seven. I determine whether Millennials have a significantly

higher likelihood of dissolution during young adulthood compared to Baby Boomers and

Generation X with the zero-order model in Table 3. Compared to Millennials, Baby Boomers

born between 1950 and 1964 and Generation X women born between 1965 and 1980 have lower

odds of ever dissolving a co-residential union during young adulthood. Do Millennials

experience higher frequencies of dissolution during young adulthood? The zero-order model in

Table 4 shows the bivariate relationship between birth cohort and the level of dissolution.

Compared to Millennials born between 1981 and 1988, Baby Boomers (1950-1964) have 0.45

the odds and Generation X (1965-1980) women have 0.59 the odds of experiencing multiple

union dissolutions prior to age twenty-seven.

The second research question determines whether cohabitation experience accounts for

more instability among Millennials. While the majority of all women who had formed a union

prior to age twenty-seven had cohabitation experience among Generation X and Millennials, the

share of women ever cohabiting prior to the age of twenty-seven increased by nearly 40%

between Baby Boomers and Millennials. This trend is consistent with the retreat from marriage

and the persistence of cohabitation during this life stage. To assess the role of cohabitation,

Model 2 in Table 4 includes cohabitation experience. The results indicate that Baby Boomer and

Generation X women continue to have significantly lower odds of having multiple dissolutions

during young adulthood compared to Millennial women, and having ever cohabited greatly

increases the odds of having more than one dissolution prior to age twenty-seven (odds ratio of

7.92).

The third research question determines whether Millennials continue to have a higher

likelihood of dissolution and more dissolutions during young adulthood with the inclusion of

demographic and socioeconomic, family background, and union characteristics. Model 2 in

Table 3 shows that the association between birth cohort and ever dissolving a union during young adulthood remains similar to Model 1 with the inclusion of demographic and socioeconomic, family background, or union characteristics. Baby Boomers have 58% lower odds (0.42) of dissolving any union by the prior to age twenty-seven relative to Millennials, and Generation X women have 41% lower odds (0.59) of dissolving a union during this time, compared to Millennials. Non-White women have a lower likelihood of dissolving a union during young adulthood than White women by at least 30%. There is a negative gradient in the association between education and union dissolution prior to age twenty-seven: increasing education reduces women's odds of ever dissolving a union, and women with a Bachelor's degree or higher at the time of their interview experience 58% lower odds of having experienced a union dissolution during young adulthood. Coming from a two-parent family is associated with almost half the odds of experiencing a dissolution compared to being raised in another family environment. If their mother had a birth as a teenager, women experience 27% higher odds of experiencing a union dissolution during young adulthood compared to women whose mothers did not have a teen birth. Finally, women whose mothers earned less than a high school diploma have 0.75 the odds of dissolving a co-residential union compared to women whose mothers did earn a high school diploma.

Analyses restricted to women who have ever been in a union also indicate that the inclusion of the covariates does not explain the association between birth cohort and union dissolution. Model 3 in Table 4 shows that similar to Model 2 in Table 4, women from Baby Boomer and Generation X birth cohorts have lower odds of multiple union dissolutions during young adulthood, and this is robust to the inclusion of these potential selection factors. Nearly all of the covariates—demographic, socioeconomic, and family background-- are significant in

predicting the odds of ever dissolving a union during young adulthood, and most of the covariates operate in a similar manner when estimating the frequencies of dissolution among women who have been in a union. Hispanic women have almost half the odds of experiencing multiple dissolutions compared to White women, and women who were raised with two parents have almost 20% lower odds of having multiple dissolutions prior to age twenty-seven. Women whose mothers did not graduate from high school have their odds of multiple dissolutions reduced by one-quarter (24%), and an increasing age at first cohabitation is associated with a decrease in the odds of multiple dissolutions during young adulthood. Non-marital childbearing prior to a first union is related to a 36% increase in the odds of having multiple dissolutions before age twenty-seven.

Does the effect of birth cohort on number of dissolutions depend on cohabitation experience? To answer this fourth question, Model 4 includes interactions between birth cohort and ever having cohabited. The interactions are not significant, and illustrate that the effect of cohabitation does not differ across birth cohorts. Baby Boomers and Generation X, regardless of whether they cohabited (results not shown) or did not cohabit (Model 4) prior to age twenty-seven, have lower odds of multiple union dissolutions during young adulthood. The main effect of cohabitation remains significant and positive.

The predicted probabilities generated from Model 3 in Table 4 are presented in Figure 2 and Figure 3 to further assess the role of birth cohort and cohabitation in driving the dissolution experiences of women before age twenty-seven. Holding all covariates at their means except the focal birth cohort and cohabitation variables, I find that, among women who were in at least one union during young adulthood, cohabiting increases the probability that they will experience one or more dissolutions prior to age twenty-seven for all birth cohorts. Regardless of cohabitation

experience, there is a birth-cohort gradient with Baby Boomers experiencing the lowest

probabilities of ending one or more than one union prior to age twenty-seven and Millennials

experiencing the greatest probability of dissolving at least one union. It is important to note that a

majority of women in all birth cohorts had cohabited prior to age twenty-seven (Table 1), and

Figure 3 may most accurately capture their dissolution experience.

DISCUSSION

The goal of this study is to extend research on young adult union instability among the most recent generation of women compared to earlier generations. It appears that 'premarital divorces' are increasingly common for more recent cohorts of Americans. Earlier studies have often considered union dissolution separately in terms of cohabitation or marriage. My research shows that it is important to build a story that considers both, due to re-arranging of marital and cohabiting experiences during young adulthood. Not only are more Millennials forming any union during young adulthood than earlier generations, these are almost exclusively cohabiting unions, and union instability experienced during young adulthood has increased.

My first question concerned generational differences in dissolution experiences between Millennials, Baby Boomers, and Generation X. I find that Millennials are cohabiting more, marrying less, and dissolving more unions-- whether marital or cohabiting-- during young adulthood than older cohorts of women. Specifically, Millennials experience a greater likelihood of ever dissolving a union and more union dissolutions during young adulthood compared to Baby Boomers and Generation X.

My second query was whether cohabitation accounted for cohort differences in the level of dissolution, and results suggest that birth cohort differences between Millennials and preceding generations are not explained by cohabitation. The birth cohort differential in dissolution among Baby Boomers and Generation X compared Millennials persists even after controlling for cohabitation experience. These findings demonstrate that accounting for cohabitation is important in explaining union dissolution differentials between birth cohorts of women, but it does not make up for birth cohort differences in instability. Rather, there is a

marked increase in the likelihood of instability during young adulthood that is not explained by the cohabitation experiences of young women.

The third research question determines whether including demographic, socioeconomic, family background, and union characteristics account for Millennials' instability. The sociodemographic composition of birth cohorts has shifted, and these changing compositional factors could explain birth cohort differences in union dissolution. In terms of ever having dissolved a union and the amount of instability experienced prior to age twenty-seven, controlling for demographic and socioeconomic, family background, and relationship characteristics does not explain the birth cohort gradient. Millennials have much higher odds of ending a union and a higher likelihood of experiencing more than one union dissolution by the age of twenty-seven than Baby Boomers and Generation X

My fourth question assessed whether cohort differences in frequencies of instability varied by cohabitation experience, and I find that this is not the case. Having ever cohabited increases the probabilities that all women experience union dissolution during young adulthood. However, Millennials have the highest probability of dissolution regardless of whether they cohabited or did not. The predicted probabilities suggest a birth cohort gradient in instability: Millennials experience the highest probability of dissolving at least one union compared to Generation X and Baby Boomers.

Young adulthood has become a period of development that garners explicit attention. It is a demographically unique and demographically 'dense' (Rindfuss, 1991) stage in individuals' lives in which they attempt to lay a foundation for future relationships and family formations much more fervently than in adolescence. It appears that relationship trajectories have become far more complex for women born after 1980, Millennials, than they were for Baby Boomers or

Generation X as they experience a greater likelihood of multiple union dissolutions. The paths through young adulthood have become less clear and more diverse, and while this relaxation of roles and pathways may seem a benefit to young adults attempting to find their way, it ultimately may induce uncertainty and vulnerability (Settersten, 2012). The increasing instability of co-residential relationships during young adulthood, then, may be related to this uncertainty and transitory nature characterizing this life stage. Facing questions about which step to take next, or which pathway to follow during this life stage, women may be choosing to end their relationships in the presence of uncertainty instead of remaining in an intact relationship or transitioning to marriage.

Relationship experiences during young adulthood, especially experiencing dissolution, can have long-term implications. They may contribute to either relationship competence or relationship baggage that is carried into new relationships and contributes to patterns and habits of relationship functioning (Young et al., 2011). Prior evidence indicates that Millennials may face increased financial and psychological instability in the aftermath of these multiple dissolutions (Avellar and Smock, 2005; Kamp Dush, 2013; Rhoades et al., 2011). They may become more likely to form stepfamilies as a result of ending and forming new cohabiting unions and bringing their children into new relationships, which can have implications for children's well-being as well as adults (Guzzo, 2016).

While these results will move our assessment of relationship break-ups forward, there are a few shortcomings. First, the NSFG does not contain couple-level data, or comparable questions between male and female questionnaires, so I am only able to analyze one side of the experience that takes two people, and I am unable to compare men and women's experiences. A focus on men's sociodemographic and risk profile in relation to the odds of overall dissolution, as well as

charting their patterns over time, may be warranted. Second, the survey is cross-sectional in nature, and relies on retrospective reports of cohabitation, which may bias reports of the number of unions as well as the start and end dates of cohabiting unions (Hayford and Morgan, 2008). Cohabitation can be ambiguous, with no institutional markers to designate the beginning and end, such as marriage or divorce proceedings. Third, cohabitations are quite heterogeneous and the meaning of cohabitation may have shifted over time, which means that the implications of these dissolutions may vary across birth cohorts. Fourth, I included controls for compositional factors, but further work could directly determine the role of composition in driving the relationship instability of Millennials. If Baby Boomers and Generation X had the same compositional characteristics in terms of sociodemographics, family background, and relationship history, would they have similar frequencies of instability as Millennials? Finally, this study focuses on a limited experience of union dissolutions prior to age twenty-seven. Certainly, women in this sample may go on to experience even more union formations and dissolutions. The focus on young adults means that few marriages are included for recent cohorts.

Many current Millennials have yet to reach, or have just reached, the formative years of young adulthood. Young women born between 1989 and 2000 the 1990s, the remainder of this generation, are anywhere between age sixteen and twenty-six. If current patterns revealed in this research continue, the younger Millennials and next generation of women may face unprecedented relationship instability. Each generation develops unique life trajectories in response to their place in history, and I find evidence that indicates a pathway to adulthood more akin to a spiral staircase than an escalator—in other words, Millennials' relationship formation experiences in young adulthood are characterized by non-marital relationships and high

frequencies of dissolution compared to older generations. Theoretical and empirical studies need to evolve to include this more complicated sense of young adulthood and union formation and stability.

FIGURE 1. Distribution of Interview Ages by Survey Year and Birth Cohort

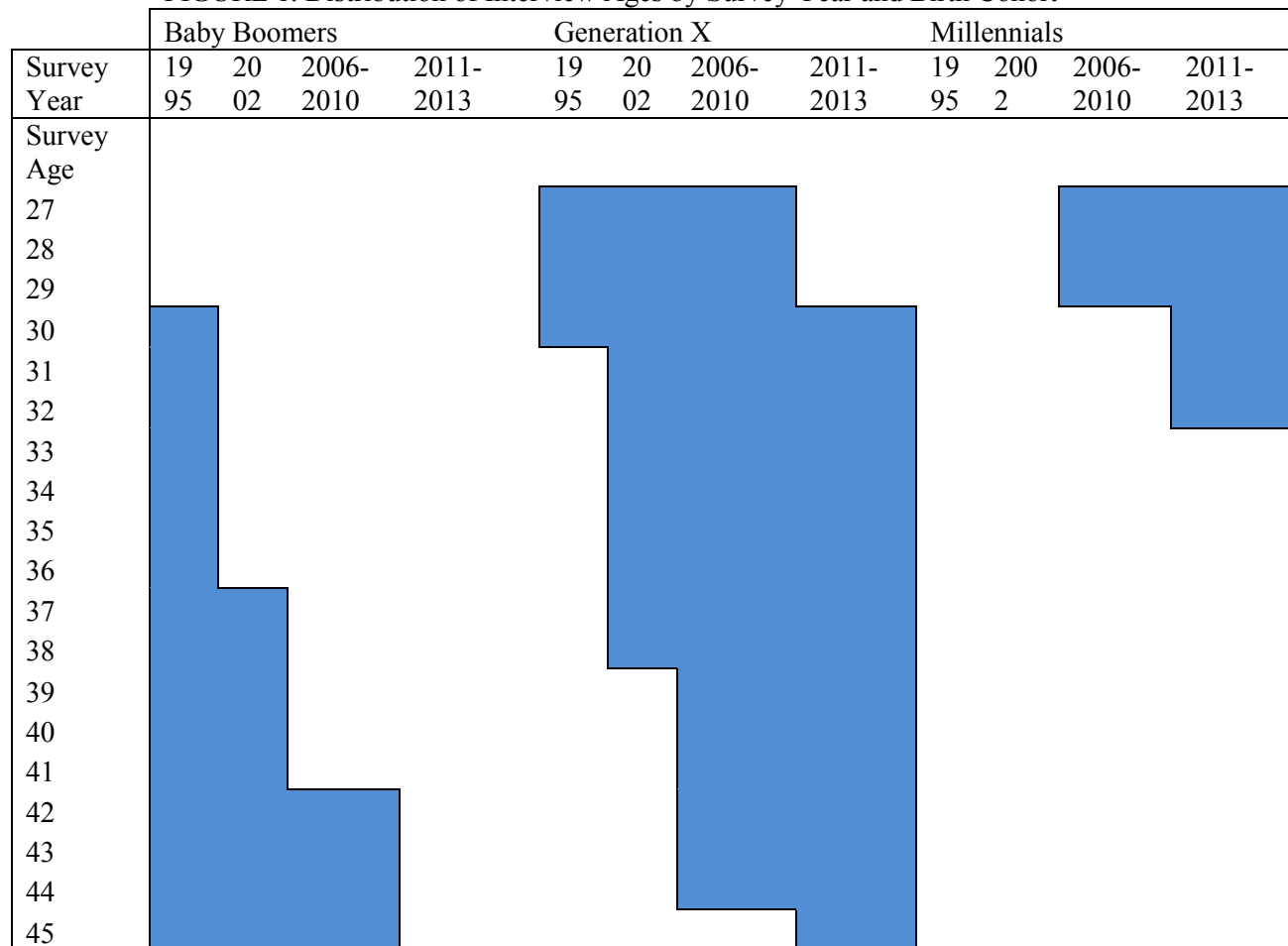|	Baby Boomers				Generation X				Millennials			
Survey Year	19 95	20 02	2006-2010	2011-2013	19 95	20 02	2006-2010	2011-2013	19 95	200 2	2006-2010	2011-2013

TABLE 1. Distribution of independent variables, women who ever had a union prior to age 27 (N = 15,984)

	Birth cohort		
	Baby Boomers (born 1950-1964)	Generation X (born 1965-1980)	Millennials (born 1981-1988)
	%| mean	%| mean	%| mean
Ever cohabited	46.5%	66.3%	81.6%
Race/ethnicity			
Non-Hispanic White	76.2%	65.6%	63.5%
Non-Hispanic Black	10.5%	12.1%	11.4%
Hispanic	9.7%	16.4%	19.9%
Non-Hispanic Other	3.7%	6.0%	5.2%
Education			
Less than high school	9.5%	10.7%	10.0%
High school diploma or GED	38.8%	30.0%	27.6%
Some college	28.8%	30.1%	35.1%
Bachelor's degree or higher	22.9%	29.2%	27.3%
Family background			
Raised with two biological/adoptive parents	69.6%	61.4%	55.7%
Mom had teen birth	14.7%	17.1%	18.4%
Mother's education			
Less than high school	31.3%	26.2%	20.9%
High school diploma or GED	44.0%	37.3%	34.4%
Some college	13.9%	20.5%	26.0%
Bachelor's degree or higher	10.8%	16.0%	18.7%
Average age at first union	20.6	20.8	20.5
Birth before the first union	18.2%	20.00%	13.7%
N	- 5979	- 8865	- 1140

Note: All values are weighted.
Source: 1995, 2006-2010, and 2011-2013 NSFG

TABLE 2. Union dissolution and birth cohort by union status prior to age 27

	Birth cohort		
	Baby Boomers (born 1950-1964) %| mean	Generation X (born 1965-1980) %| mean	Millennials (born 1981-1988) %| mean
Among all women (N=22,000)			
Ever dissolved a union	18.5%	23.5%	34.4%
Among women ever in a union (N=15,984)			
Ever dissolved a union	24.7%	30.3%	42.1%
Frequency of dissolution			
0	74.8%	69.4%	57.8%
1	20.8%	24.5%	31.7%
2+	4.4%	6.1%	10.7%
Among ever married (N=11.563)			
Ever divorced	14.9%	12.8%	15.1%
Among ever cohabited (N=9,889)			
Ever dissolved a cohabitation	28.4%	33.4%	42.5%
Share of dissolutions (N=15,984)			
No dissolution	75.7%	69.8%	58.9%
All cohabiting	11.8%	20.8%	32.4%
Some	1.3%	1.3%	1.4%
All marital	11.2%	8.0%	7.3%
N	- 5979	- 8865	- 1140

Note: All values are weighted.

Source: 1995, 2006-2010, and 2011-2013 NSFG

TABLE 3. Logistic regression predicting ever dissolving a union, all women prior to age 27 (N = 22,000)

Variable	Model 1 Odds Ratio	SE	Model 2 Odds Ratio	SE
Intercept	0.52***	0.05	1.14***	0.13
Birth cohort (ref = Millennials b.1981-1988)				
Baby Boomers (b.1950-1964)	0.43***	0.05	0.42***	0.04
Generation X (b. 1965-1980)	0.59***	0.07	0.59***	0.06
Race (ref = White)				
Black			0.68***	0.05
Hispanic			0.53***	0.05
Other			0.67***	0.08
Education (ref = high school)				
Less than high school			1.04	0.10
Some college			0.91	0.05
Bachelor's degree or higher			0.42***	0.03
Raised by two parents (reference = no)			0.55***	0.03
Mother had a teen birth (reference = no)			1.27**	0.08
Mother's education (ref = high school)				
Less than high school			0.75***	0.05
Some college			1.11	0.07
Bachelor's degree or higher			1.08	0.08

Source: 1995, 2006-2010, and 2011-2013 NSFG

Note: All values are weighted
*p < 0.05 ** p < 0.01 *** p < 0.001

TABLE 4. Ordered logistic regression of 2+ dissolutions on birth cohort and union type, women ever in a union prior to age 27 (N = 15,984)

Variable	Model 1 Coefficient	SE	Model 2 Coefficient	SE	Model 3 Coefficient	SE	Model 4 Coefficient	SE
Birth cohort (reference = Millennials b. 1981-1988)								
Baby Boomers (b. 1950-1964)	0.45***	0.05	0.77*	0.10	0.71*	0.11	0.70*	0.11
Generation X (b. 1965-1980)	0.59**	0.07	0.72*	0.09	0.69*	0.10	0.70*	0.11
Ever cohabited (reference = never cohabited)			7.92***	0.62	8.16***	0.66	8.20***	3.15
Race (ref = White)								
Black					0.91	0.09	0.91	0.08
Hispanic					0.56***	0.06	0.56***	0.06
Other					0.17	0.15	0.81	0.13
Education								
Less than high school					0.83	0.09	0.83	0.08
Some college					1.01	0.07	1.01	0.07
Bachelor's degree or higher					1.08	0.10	1.08	0.09
Raised by two parents (reference = was not)					0.81***	0.05	0.81***	0.05
Mother had a teen birth (reference = did not)					1.14	0.11	1.14	0.10
Mother's education								
Less than high school					0.77***	0.06	0.77***	0.06
Some college					1.14	0.10	1.15	0.09
Bachelor's degree or higher					1.16	0.10	1.16	0.10
Age at first cohabitation					0.69***	0.01	0.69***	0.009
Childbearing history (reference = did not have a non-marital birth)								
Had a non-marital birth before first union					1.36***	0.10	1.36***	0.11
Interactions (reference: Millennials x ever cohabited)								
Baby Boomers (b. 1950-1964) x ever cohabited							1.07	0.42
Generation X (b. 1965-1980) x ever cohabited							0.95	0.39

Source: 1995, 2006-2010, and 2011-2013 NSFG
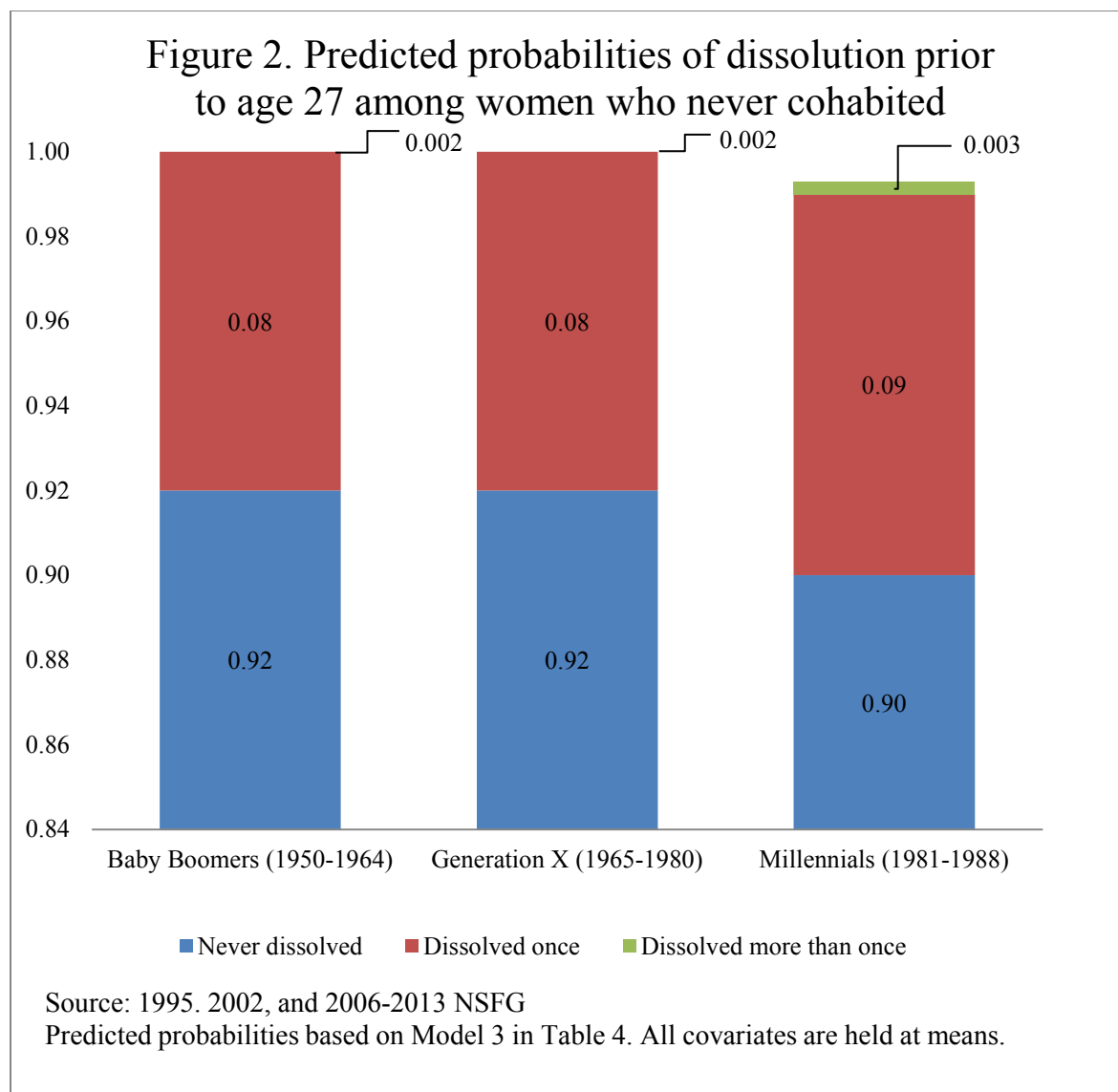Note: All values are weighted
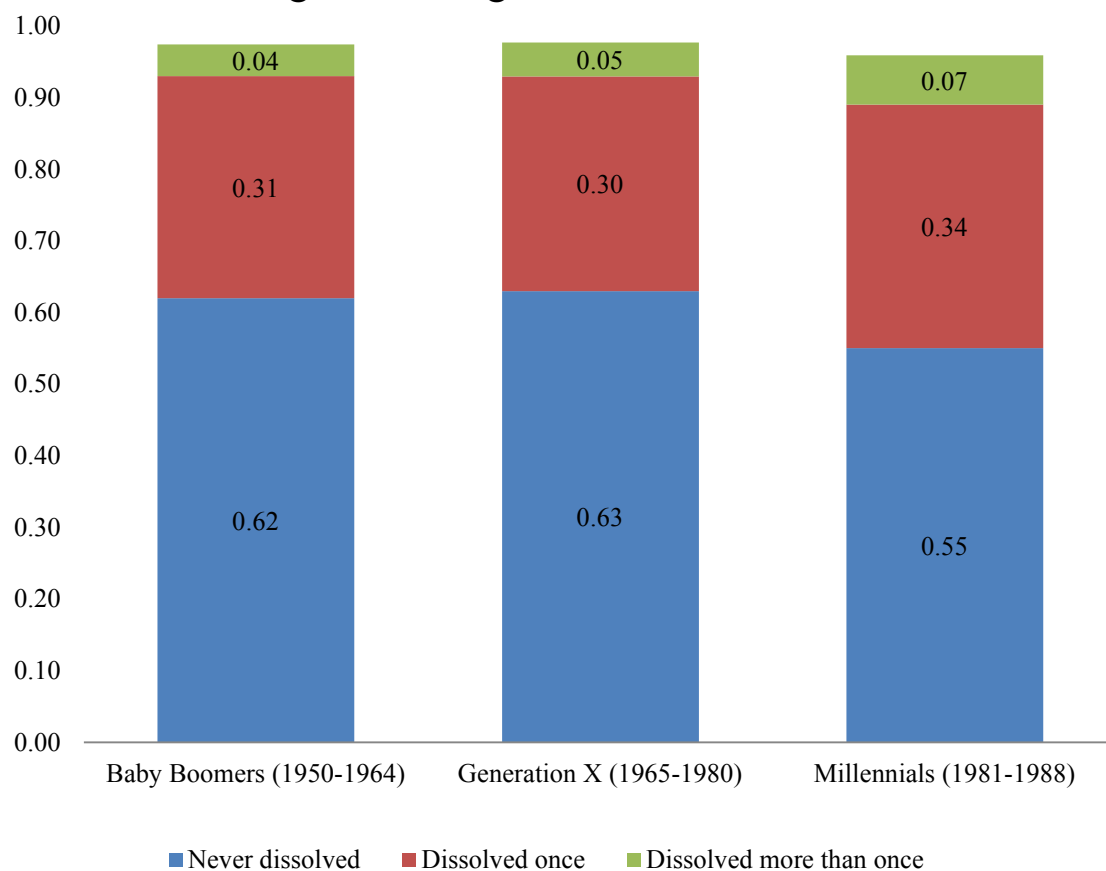*p < 0.05 ** p < 0.01 *** p < 0.001

Figure 2. Predicted probabilities of dissolution prior to age 27 among women who never cohabited

Source: 1995. 2002, and 2006-2013 NSFG
Predicted probabilities based on Model 3 in Table 4. All covariates are held at means.

Figure 3. Predicted probabilities of dissolution prior to age 27 among women who cohabited

	Never dissolved	Dissolved once	Dissolved more than once
Baby Boomers (1950-1964)	0.62	0.31	0.04
Generation X (1965-1980)	0.63	0.30	0.05
Millennials (1981-1988)	0.55	0.34	0.07

Source: 1995. 2002, and 2006-2013 NSFG
Predicted probabilities based on Model 3 in Table 4. All covariates are held at means.

REFERENCES

Amato, P. R. (1996). Explaining the intergenerational transmission of divorce. *Journal of Marriage and the Family*. 58(3): 628-640. doi: 10.2307/353723

Amato, P. R. (2010). Research on divorce: Continuing trends and new developments. *Journal of Marriage and Family*, 72(3): 650-666. doi: 10.1111/j.1741-3737.2010.00723.x

Anderson, L., & Payne, K.K. (2016). *Median Age at First Marriage, 2014.* (FP-16-07). Resource document. National Center for Family and Marriage Research. https://www.bgsu.edu/ncfmr/resources/data/family-profiles/anderson-payne-median-age-first-marriage-fp-16-07.html

Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist*, 55(5): 469-480. doi: 10.1037/0003-066X.55.5.469

Arnett, J. J. (2006). "Emerging adulthood: understanding the new way of coming of age" pp. 3-20 in "Emerging adults in America: coming of age in the 21st century", edited by J. J. Arnett & J. L. Tanner. American Psychological Association: Washington, DC.

Avellar, S., & Smock, P. J. (2005). The economic consequences of the dissolution of cohabiting unions. *Journal of Marriage and Family*, 67(2): 315-327. doi: 10.1111/j.0022-2445.2005.00118.x

Brown, S.L., Lin, I.F., Payne, K.K. (2014). Age variation in the divorce rate, 1990-2012. (FP-14-16). Resource document. National Center for Family and Marriage Research. https://www.bgsu.edu/content/dam/BGSU/college-of-arts-and-sciences/NCFMR/documents/FP/FP-14-16-age-variation-divorce.pdf

Bumpass, L. L. (1990). What's happening to the family? Interactions between demographic and institutional change. *Demography*, 27(4): 483-498.

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. doi: 10.1080/713779060

Cherlin, A. J. (2004). The deinstitutionalization of American marriage. *Journal of Marriage and Family*, *66*(4): 848-861. doi/10.1111/j.0022-2445.2004.00058.x

Cherlin, A. J. (2010). Demographic trends in the United States: A review of research in the 2000s. *Journal of Marriage and Family*, 72(3): 403-419. 10.1111/j.1741-3737.2010.00710.x

Clark, S.C. (1995). Advance report of final divorce statistics, 1989 and 1990. *National Health Statistics Reports,* 43(9):1-32.

Cohen, J., & Manning, W. (2010). The relationship context of premarital serial cohabitation. *Social Science Research*, 39(5): 766-776. doi:10.1016/j.ssresearch.2010.04.011

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*, (64): 1-15.

DiPrete, T.A., Buchmann, C. (2013). *The rise of women: The growing gender gap in education and what it means for American schools.* Resource document. Council on Contemporary Families. https://contemporaryfamilies.org/wp-content/uploads/2013/10/2013_Briefing_DiPrete_The-rise-of-women.docx

Elder, G. H. (1998). The life course as developmental theory. *Child Development*, 69(1): 1-12. doi: 10.1111/j.1467-8624.1998.tb06128.x

Guzzo, K.B. (2016). *Stepfamilies in the U.S.* (FP-16-09). Resource Document. National Center for Family and Marriage Research. https://www.bgsu.edu/ncfmr/resources/data/family-

profiles/guzzo-stepfamilies-women-fp-16-09.html

Guzzo, K. B. (2014). Trends in cohabitation outcomes: Compositional changes and engagement among never-married young adults. *Journal of Marriage and Family*, 76(4): 826-842. DOI: 10.1111/jomf.12123

Hayford, S. R., & Morgan, S. P. (2008). The quality of retrospective data on cohabitation. *Demography*, 45(1): 129-141. doi: 10.1353/dem.2008.0005

Kamp Dush, C. M. (2013). Marital and cohabitation dissolution and parental depressive symptoms in fragile families. *Journal of Marriage and Family*, 75(1): 91-109. doi: 10.1111/j.1741-3737.2012.01020.x

Kennedy, S., & Ruggles, S. (2014). Breaking up is hard to count: The rise of divorce in the United States, 1980–2010. *Demography*, *51*(2): 587-598. doi: 10.1007/s13524-013-0270-9

Lamidi, E.O. (2015a). *Trends in marriage: Twenty-five years of change, 1989-2014.* (FP-15-17). Resource document. National Center for Family and Marriage Research. https://www.bgsu.edu/ncfmr/resources/data/family-profiles/lamidi-25yr-change-marriage-US-1989-2014-fp-15-17.html

Lamidi, E.O. (2015b). *Trends in cohabitation: The never married and previously married, 1995-2014.* (FP-15-21). Resource document. National Center for Family and Marriage Research. https://www.bgsu.edu/ncfmr/resources/data/family-profiles/lamidi-cohab-trends-never-previously-married-fp-15-21.html

Lamidi, E.O., Manning, W.D., Brown, S.L. (2015). Change in the stability of first premarital cohabitation, 1980-2009. (Working Paper 2015-26). Retrieved from Center for Family and Demographic Research website https://www.bgsu.edu/content/dam/BGSU/college-

of-arts-and-sciences/center-for-family-and-demographic-research/documents/working-papers/2015/WP-2015-26-Lamidi-Change-in-Stability-of-First-Premarital-Cohabitation.pdf.

Lichter, D.T., Turner, R.N, Sassler, S. (2010). National estimates of the rise in serial cohabitation. *Social Science Research* 39(5):754-765. doi:10.1016/j.ssresearch.2009.11.002

Lundberg, S., & Pollak, R. A. (2013). Cohabitation and the uneven retreat from marriage in the U.S., 1950-2010 (Working Paper No. 19413). *National Bureau of Economic Research*. doi: 10.3386/w19413

Lundberg, S., Pollak, R. A., & Stearns, J. (2016). Family inequality: Diverging patterns in marriage, cohabitation, and childbearing. *The Journal of Economic Perspectives*, *30*(2), 79-101. doi: http://dx.doi.org/10.1257/jep.30.2.79

Lyngstad, T. H., & Jalovaara, M. (2010). A review of the antecedents of union dissolution. *Demographic Research*, 23(10): 257-292. doi: 10.4054/DemRes.2010.23.10

Manning, W.D. (2013). *Trends in cohabitation: Over twenty years of change, 1987-2010*. (FP-13-12). Resource document. National Center for Family and Marriage Research. http://www.firelands.bgsu.edu/content/dam/BGSU/college-of-arts-and-sciences/NCFMR/documents/FP/FP-13-12.pdf

Manning, W. D., & Stykes, B. (2015). *Twenty-five years of change in cohabitation in the U.S., 1987-2013. (FP-15-01)*. Resource document. National Center for Family and Marriage Research. http://www.bgsu. edu/content/dam/ BGSU/college-ofarts-and-sciences/ NCFMR/documents/ FP/FP-15-01-twentyfive-yrs-changecohab.pdf.

Manning, W.D., Brown, S.L., Payne, K.K. (2014). Two decades of stability and change in age

at first union formation. *Journal of Marriage and Family* 76(2):247-260.

DOI: 10.1111/jomf.12090

McLanahan, S. (2004). Diverging destinies: How children are faring under the second

demographic transition. *Demography* 41(4), 607-627. doi: 10.1353/dem.2004.0033

Muraco, J. A., & Curran, M. A. (2012). Associations between marital meaning and reasons to

delay marriage for young adults in romantic relationships. *Marriage & Family*

Review, 48(3): 227-247. doi: 10.1080/01494929.2012.665013

Musick, K., & Michelmore, K. (2015). Change in the stability of marital and cohabiting unions

following the birth of a child. *Demography*, 52(5), 1463-1485.doi: 10.1007/s13524-015-

0425-y

Payne, K.K. (2011). *On the road to young adulthood: Forming families.* (FP-11-08). Resource

document. National Center for Family and Marriage Research.

https://www.bgsu.edu/content/dam/BGSU/college-of-arts-and-

sciences/NCFMR/documents/FP/FP-11-08.pdf

Raley, R., Sweeney, M., & Wondra, D. (2015). The growing racial and ethnic Divide in U.S.

marriage patterns. *The Future of Children, 25*(2), 89-109. Retrieved from

http://www.jstor.org/stable/43581974

Raley, R. K., & Bumpass, L. (2003). The topography of the divorce plateau: Frequencies and

trends in union stability in the United States after 1980.*Demographic Research*, 8(8):

245-260. DOI: 10.4054/DemRes.2003.8.8

Rhoades, G. K., Kamp Dush, C. M., Atkins, D. C., Stanley, S. M., & Markman, H. J. (2011).

Breaking up is hard to do: the impact of unmarried relationship dissolution on mental health and life satisfaction. *Journal of Family Psychology*, 25(3):366-374. doi: 10.1037/a0023627

Rindfuss, R. R. (1991). The young adult years: Diversity, structural change, and fertility. *Demography*, 28(4): 493-512.

Rotz, D. (2015). Why have divorce rates fallen? The role of women's age at marriage. *Journal of Human Resources* 51(2). doi: 10.3368/jhr.51.4.0214-6224R

Settersten Jr., R.A. (2012). "The contemporary context of young adulthood in the USA: From demography to development, from private troubles to public issues" pp. 11-26 in Early adulthood in a family context: National symposium on family issues, edited by A. Booth, S.M. McHale, N.S. Landale, S.L. Brown, and W.D. Manning. Springer: New York City, New York.

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.

Teachman, J. (2002). Childhood living arrangements and the intergenerational transmission of divorce. *Journal of Marriage and Family*, 64(3), 717-729. Retrieved from http://www.jstor.org/stable/3599937

Teachman, J. D., Tedrow, L. M., & Crowder, K. D. (2000). The changing demography of America's families. *Journal of Marriage and Family*, 62(4): 1234-1246. doi: 10.1111/j.1741-3737.2000.01234.x

Vespa, Jonathan. (2014). Historical trends in the marital intentions of one-time and serial cohabitors. *Journal of Marriage and Family* 76(1):207-217. DOI:10.1111/jomf.12083

Young, B. J., Furman, W. & Laursen, B. (2011). Models of change and continuity in romantic

experiences In F.D. Fincham and M. Chui (Ed.): *Romantic Relationships in Emerging Adulthood*, (pp.44-66). Cambridge, England: Cambridge University Press.

APPENDIX

Appendix Table I. Means and Percentages by birth cohort, full sample (N = 22,000)

	Birth cohort		
	Baby Boomers (born 1950-1964) %| mean	Generation X (born 1965-1980) %| mean	Millennials (born 1981-1988) %| mean
Ever in a union	73.8%	75.7%	79.3%
Interview cycle			
1995	61.6%	7.9%	-
2002	31.5%	25.3%	-
2006-2010	6.9%	36.3%	15.0%
2011-2013	-	30.6%	85.0%
Race/ethnicity			
Non-Hispanic White	72.4%	62.7%	61.3%
Non-Hispanic Black	12.8%	14.1%	12.8%
Hispanic	10.6%	16.6%	20.0%
Non-Hispanic Other	4.3%	6.6%	5.9%
Family background			
Raised with two biological parents	69.4%	62.3%	58.5%
Mom had teen birth	15.9%	16.9%	16.5%
Mother's education			
Less than high school	32.9%	26.1%	21.5%
High school diploma or GED	42.0%	36.1%	32.5%
Some college	13.5%	20.7%	26.5%
Bachelor's degree or higher	11.5%	17.1%	19.6%
Education			
Less than high school	11.3%	11.0%	11.1%
High school diploma or GED	36.4%	28.4%	25.3%
Some college	26.9%	28.1%	32.4%
Bachelor's degree or higher	25.5%	32.5%	31.2%
N	- 8296	- 12242	- 1462

Note: All values are weighted.

Source: 1995, 2006-2010, and 2011-2013 NSFG