Research Note: New Patterns of Union Formation and Fertility Among Young Adults

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Abstract

This paper provides updated union and fertility information among young adults comparing older and more recent datasets. Overall, union formation has increased somewhat over the past 15 years, young adults aged 19-25 are increasingly cohabiting rather than marrying as a first union. More young adults are cohabiting, but fewer cohabitations are transitioning to marriage, and twice as many have cohabited with more than one partner. When they do marry, more young adults have already cohabited, though the proportion who had cohabited *only* with their spouse has declined. Fewer young adults are having children, but the proportion of nonmarital births has increased slightly. However, cohabiting births account for a decreasing proportion of nonmarital births, and a smaller percentage of cohabitors are having births. More marriages are preceded by a nonmarital and/or cohabiting birth, but a lower percentage of those with a nonmarital or cohabiting birth eventually marry.

Keywords: cohabitation, marriage, nonmarital fertility, young adults

Introduction

Union and family formation has changed dramatically in the past few decades, particularly among young adults. The median age at first marriage has risen from 22.8 for males and 20.3 for women in 1950 to 26.9 and 25.3 respectively 2002 (Census 2003). Similarly, the age at first birth has risen from 21.4 in 1970 to 25.1 in 2001 (Martin, Hamilton, Sutton, Ventura, Menacker, & Munson 2003). The proportion of nonmarital births has increased from about a tenth in 1970 to a third in 2001 (Freid, Prager, MacKay, & Xia 2003). Cohabitation has also risen in prevalence, now preceding most marriages and largely replacing remarriage (Bumpass 1995, 1998; Bumpass, Sweet, & Cherlin 1992). These broad demographic changes have occurred quickly, begging deeper research into these trends.

Most of the detailed information about marriage and cohabitation in recent years comes from data collected in the late 1980s and early to mid-1990s (Smock 2000). In particular, the longitudinal National Survey of Families and Households (NSFH) and the 1995 cycle of the National Survey of Family Growth (NSFG) have been the best sources. The NSFH is a panel study of men and women aged 19 and older during the first wave of data collection (1987-1988); the second wave reinterviewed these individuals in 1992-1994. While a major advantage of the NSFH is its panel nature, the sample is aging, and the rapid change in union formation noted above would suggest that current union patterns among young adults might differ substantially from those in 1987-1988. The NSFG, a cross-sectional survey, interviewed only women aged 18-44 in 1995, so it is not applicable to the population as a whole and may also be a bit dated. Thus, there is a need for more recent information on general patterns of cohabitation and marriage, especially for young adults, whose family formation behaviors have likely changed the most dramatically. This paper provides such information from the 2001-2002 wave of the

National Longitudinal Study of Adolescent Health (Add Health), examining new patterns of cohabitation, marriage, and childbearing.

Cohabitation and Marriage

Although marriage has been delayed, sexual activity has not been similarly delayed, and young people are still having intimate relationships, many of which are coresidential. As such, family demography has recognized cohabitation as an important family structure. The NSFH and the NSFG marked a clear advance in our knowledge of cohabitation, as earlier research was based on nonrepresentative samples or inferred cohabitation status from household structure questions. In particular, these two samples produced the first sets of nationally representative estimates of cohabitation. With these two main data sources (along with a few others), researchers were finally able to study and, in some instances, track, cohabitors and their unions. Because so little was known about cohabitation as a whole B who cohabits, the duration of cohabitation, how cohabitations end, among other issues B most research focused on those who had ever cohabited as a group, often failing to distinguish between those who had cohabited with only their future spouse, those who cohabited once but did not marry their partner, and those who cohabited multiple times.

Descriptive demographic research on cohabitation has shown that most young people will cohabit at some point in their life and that the majority of marriages are now preceded by cohabitation, though a smaller proportion of cohabitations are now ending in marriage (Bumpass 1995, 1998). Cohabitation has dramatically increased in prevalence as well, perhaps becoming less selective over time. About 10% of marriages formed during 1965-1970 were preceded by cohabitation, compared with over 50% of marriages formed during 1990-1994; similarly, only 30% of women in their late 30s reported having ever cohabited in 1987-1988, but this increases

to 48% in 1995 (Bumpass & Sweet 1989; Bumpass & Lu 2000). We also know that cohabitation is generally selective of those of lower socioeconomic status (variously measured by education, income, and employment) (Smock 2000), though there are few racial and ethnic differences (Bumpass & Lu 2000). Cohabitation also appears to be selective of those who are less religious, more egalitarian, and more liberal (Clarkberg, Stolzenberg, & Waite 1995; Thornton, Axinn, & Hill 1992). However, as cohabitation has become more common, some argue that selectivity has declined (Gwartney-Gibbs 1986).

Beyond descriptive demographic work, a major theoretical area of research involves attempts to determine where to situate cohabitation along the relationship spectrum. Is cohabitation an alternative to being single, a stage in the marriage process, or an alternative to marriage? No clear answer has emerged, with conclusions varying among racial and ethnic groups, marital status, and age (as well as those with other characteristics) (Smock 2000). The picture might be even murkier for those with more than one cohabitation. For cohabitations that do not end in marriage, their unions as a whole do not seem to fit easily into any of these categories, or rather, perhaps different cohabitations fill different purposes over the life course. The presence of children in unions further clouds the picture, especially when the children are not the biological offspring of both partners.

Still other studies have attempted to explain the oft-demonstrated negative relationship between cohabitation and subsequent marital stability (Axinn & Thornton 1992; Schoen 1992; Teachman, Thomas, & Paasch 1991; Thomson & Colella 1992), generally focusing on different attitudes among cohabitors (including a lower commitment to marital permanence) occurring though selection into cohabitation or a causal effect of cohabitation on attitudes. Though most such work does not discern between different types of cohabitation, it has been suggested that the

negative relationship is present only among serial cohabitors, i.e, that only multiple cohabitors are less committed to marriage (Teachman & Polonko 1990; DeMaris & Rao 1992; DeMaris & MacDonald 1993).

However, relatively little is known about those who have cohabited more than once. Only a few studies have included measures of multiple cohabitation, none studying it as the primary focus. Thornton (1988) found that among Detroit-area white 23-year-olds in 1985, approximately 6% of women and 4% of men reported cohabiting with more than one partner. Less than 3% of both men and women in the National Longitudinal Study of the High School Class of 1972 (NLS-72) had cohabited more than once by 1979, and these multiple cohabitors had a higher risk of marital instability, though those with only one cohabitation did not have a higher risk (Teachman and Polonko 1990). Looking at first marriages of less than 10 years duration in the first wave of the NSFH, about 10% had experienced more than one cohabitation (DeMaris & MacDonald 1993). Although there were no significant differences between noncohabitors, single cohabitors, and serial cohabitors in commitment to marital permanence, those who had experienced more than one cohabitation were more likely to have an unstable marriage while those who had cohabited only once were not.

Childbearing and childrearing

In addition to shifts in union formation, patterns of fertility have changed as well. As mentioned earlier, the age at first birth has increased dramatically over the past few decades. Rising levels of nonmarital fertility have been well-documented (Martin et al 2002), reaching about one-third of all births in 2002, reflecting increased exposure due to rising age at first marriage, declining rates of legitimizing nonmarital pregnancies, and increased rates of childbearing among unmarried women (Bumpass & Lu 2000). Nonmarital fertility accounts for

about one-fourth of all non-Hispanic white births, about 70% of births among non-Hispanic blacks, and about 45% of birth among Hispanics. Among women 18 and younger, four-fifths of birth are outside of marriage, though by the early 1990s, nonmarital births to women aged 20 and older accounted for more then two-thirds of all nonmarital births (Ventura, Bachrach, Hill, Kaye, Holcomb, & Koff 1995).

Besides changes in marriage and increasing acceptance of nonmarital fertility, cohabitation has also played a role in changing fertility patterns. The proportion of nonmarital births to cohabiting women increased from 29% to 39% between 1980-84 and 1990-94, and the overall increase in nonmarital childbearing over this period is almost completely attributable to cohabiting two-parent families (Bumpass & Lu 2000). By 1995, nearly 40% of all children are expected to spend some time in a cohabiting family before age 16. **Data and Methodology**

To provide updated union and family information for young adults, I use two surveys which were collected approximately 15 years apart, Wave I of the National Survey of Families (1987-88) and Households and Wave III of the National Longitudinal Study of Adolescent Health (2001-02). The NSFH is a longitudinal, nationally representative sample of individuals aged 19 or older at the first wave, 1987-1988, with a sample size of 13,007. The NSFH includes oversamples of blacks, Puerto Ricans, Mexican-Americans, single-parent families and families with stepchildren, cohabiting couples, and recently married couples. To focus on young adults, I restrict the sample to those aged 19-25 at the first wave for a sample size of 1,962.

Add Health is a nationally representative sample of adolescents who were enrolled in grades 7 through 12 in 1995, when the first wave of the survey was conducted. Add Health was designed to capture the multitude of influences (individual, peer, parental, school, community) that affect adolescents, using a clustered, school-based sampling design. Individuals were

identified through school enrollment rosters, including those who may have dropped out or transferred but have not yet been removed from formal school lists and excluding those who have officially dropped out. Oversamples of blacks with college-educated parents, Cubans, Puerto Ricans, and Chinese, as well as genetic samples (twins and full and half-siblings) and a sample of nonbiologically related adolescents living in the same household, were included, creating a total sample size of 20,745 at Wave I. Follow-up surveys were conducted in 1996 and in 2001-2002. The analyses in this paper utilize the third wave, when respondents were approximately aged 18-26, with a sample size of 15,197. In this wave, detailed union and fertility histories since 1995 were collected, which for this young population essentially comprises a full history. Wave III of Add Health is the most recent publicly available national dataset containing cohabitation and marriage histories, making it the most appropriate dataset to study current trends in the family formation behaviors of young adults. However, to the extent that those who had dropped out of school in 1995 were excluded from the sample, the likelihood of which increases with age, Add Health may slightly underrepresent those age 18-26 as a whole. Rather, it is representative of those who were enrolled in school. Additionally, because of very small sample sizes at age 18 and ages 26, I focus on those aged 19-25, and I also exclude those with inconsistent union and fertility data (about 3% of the sample), for a final sample size of 13,135.

Comparing these two samples has drawbacks. While I do not believe the differences between samples make comparisons impossible, it is important to keep them in mind when looking at estimates across samples and over time. The biggest disadvantage is that the two surveys have different sampling frames. To the extent that the school-based sampling frame of Add Health systematically misses school dropouts, it underrepresents those of lower socioeconomic status. The NSFH, on the other hand, is drawn from multi-stage area probability

sample of about 17,000 housing units from 100 sampling areas in the conterminous United State, including only those who spoke English or Spanish. It is more representative of the United States population as a whole than Add Health, though there is the possibility that the NSFH may have missed some of those living in college dormitories or military barracks (Sweet, Bumpass, & Call 1988). Despite the differences in sampling design, though, these surveys nonetheless represent the best possible estimates of union formation behavior among young adults at two separate time points.

Another drawback is that the questionnaires have different structures and focuses. Questions were asked in different ways, so there is some question of comparability of particular variables across samples. The NSFH was concerned about capturing cohabitations, and in an effort to maximize reporting and minimize issues of social acceptability, the cohabitation history was prefaced by the statement ANowadays, many couples live together; sometimes they get married and sometimes they don=t.@ Cohabitation history was first gathered in reference to particular marriages, if any, (i.e, ADid you live with your first husband/wife before marriage?@), with other cohabitations gathered chronologically in the NSFH. In Add Health, the cohabitation history was preceded by the question AHave you ever lived with someone in a marriage-like relationship for one-month or more?,@ which may miss respondents who did not consider their relationship as marriage-like or those of less than one-month duration. Cohabitations were also not gathered in reference to particular marriages, though it was asked whether the cohabitation ever resulted in marriage, and cohabitations were not gathered chronologically, which could arguably allow for greater error in date reporting and possibly the exclusion of some cohabitations.

Finally, many standard sociodemographic variables, such as parental structure during the

teenage years, were measured as retrospective variables referring to a specific age in the NSFH but were measured as current variables in the first wave of Add Health. As such, in Add Health, variables of this type refer not to one age for all respondents but to their age at the time of the first survey. Add Health also collected more detailed information on parental background and nativity, allowing for more fine-grained categories of variables, but generally parental background information was only collected at the first wave, so changes in family structure after the first wave are unknown.

Descriptive analyses consider five cohabitation statuses: no cohabitation, one cohabitation ending in marriage (>premarital=), one cohabitation not ending in marriage (>nonmarital,= broken down by currently cohabiting vs. not currently cohabiting), more than one cohabitation but no marriages (broken down by currently cohabiting vs. not currently cohabiting) and at least one nonmarital cohabitation and one premarital cohabitation. It is defined in reference either to the full cohabitation history if never-married or to cohabitations prior to marriage among ever-married persons. This is done because research has demonstrated that many individuals cohabit after marriage, and postmarital cohabitations have different characteristics than premarital cohabitations (Bumpass, Sweet, & Cherlin 1992). Ever married is defined similarly in both samples, regardless of whether the marriage was still intact. While being separated or divorced is measured straightforwardly in the NSFH, it includes those who are either divorced or who report living apart from their spouse in Add Health, which can include those whose spouse lives apart for work, education, or military reasons. Finally, fertility measures include whether the individual had a child, whether they were married at first birth, and whether they were cohabiting at first birth.

To examine sample differences across surveys, I compare sociodemographic characteristics, selecting variables based on evidence from prior work on union and family formation. Sociodemographic variables include gender, race (defined as non-Hispanic white, non-Hispanic black, Hispanic, or other in the NSFH, and as non-Hispanic white, non-Hispanic black, Hispanic Asian, or Indian in Add Health), age, nativity, family structure (both biological parents, two-parent stepfamily, single mother, single father, or other) at age 15 for the NSFH and at wave 1 for Add Health, parental education (parents=education missing, less than high school, high school graduate, some college, college, and for Add Health, professional/graduate). Parental education is defined as the highest level achieved by either parent; missing is included as a category because about 10% of both samples have missing parental education, and I did not want to exclude these from analyses. I also include variables indicating whether their parents ever received public assistance (as of age 16 in the NSFH or of the first wave of Add Health) as a measure of financial need as well as if they had ever had a birth before age 18 (which may encourage cohabitation but discourage marriage). A variable indicating whether they ever been forced to move out of the parental home by their parents (Add Health) or moved out due to parental conflict or sent to live elsewhere by their parents (NSFH); these individuals may cohabit out of necessity. Frequency of religious service attendance, as a measure of religiosity, is included, which may discourage cohabitation but encourage marriage. Finally, two socioeconomic indicators, having attended college and having ever worked full-time (both of which, particularly college attendance, are related to age), are included. It is expected that those who attended college are unlikely to cohabit or marry, while the relationship between work and union formation is less clear. On the one hand, those who have worked full-time during the young adult years may be doing so out of financial necessity and taking on more adult

responsibilities, which may encourage cohabitation. On the other hand, if holding a full-time job represents in stability, it may discourage cohabitations and encourage marriage.

I first describe the trends in union formation and fertility behaviors using weighted figures. I then move to multivariate analyses of union formation, predicting first union type (premarital cohabitation, cohabitation not ending in marriage, and marriage) and predicting the likelihood of having more than one cohabitation among those who had ever cohabited. Finally, I analyze the likelihood of having a nonmarital birth and a cohabiting birth and the likelihood of marrying after each. The multivariate analyses examine whether the relationship between socioeconomic variables has changed over time.

Results

Descriptive Statistics

B *Table 1 here* B

Descriptive statistics of both the independent and dependent variables are presented in Table 1, and there are some differences between samples. The Add Health cohort has more educated parents but is less likely to live with both biological parents. A smaller proportion of the Add Health group is foreign born, likely due to sampling frame differences, as foreign born adolescents may be less likely to be enrolled in school, or individuals may not immigrate to the United States until they are older. Due to sampling differences, the Add Health sample has a lower proportion of non-Hispanic whites. A much smaller percentage of the NSFH cohort had been kicked out or left the parental home as an adolescent, probably due to differences in question wording between samples. The NSFH had slightly higher percentages of those who had received welfare during adolescence and of those who had a teenage birth. Surprisingly, a greater percentage of the young adults in Add Health report attending religious services once a

week or more frequently; with the general decline in religiosity in the United States, I would have expected otherwise. More Add Health young adults had attended college at some point and had worked full-time. Education levels in the United States have increased in the general population between these two surveys, which may have contributed to the higher levels of education and employment than found in the NSFH.

Prevalence of Marriage and Cohabitation

Figure 1 shows the weighted overall proportion of those who had formed any union (cohabitation or marriage) by age for both surveys, with the overall proportion of the sample who formed a union in parentheses. The overall proportion of those who had formed any union has increased over time, going from about 43% in 1987-89 to 50% in 2001-02. The union gap declines as the samples age, and by age 25, a slightly higher percentage of the earlier cohort had formed a union.

B *Figure 1 here* B

Overall union formation patterns hide large shifts in union type between 1987-1988 and 2001-2002. Figure 2 shows the percentage ever married and ever cohabited for the two surveys by age, with the overall proportion of each category in parentheses. Over a quarter of young adults had married in the earlier sample; just 15 years later, this had declined over 10%, while the proportion who had ever cohabited increased 15% to about 43%. The proportion ever married (represented by squares) is lower at every age in 2001-2002 than in 1987-1988 and diverges substantially by age 23. By 25, about 55% had ever married in 1987-1988 compared to less than 35% by 2001-2002. Conversely, the proportion who had ever cohabited (looking at all cohabitations among never-married persons and only at premarital cohabitations for those who had ever been married) is consistently higher in Add Health than the NSFH at every age. About

half of those age 25 in Add Health had ever cohabited, while only a little over one-third of the NSFH 25-year-olds had. In sum, while the overall proportion of young adults who had experienced a coresidential union has grown slightly, young people are increasingly avoiding marriage in favor of cohabitation. That young people are not marrying is not surprising, given the rising age of first marriage in the United States; however, the degree to which cohabitation has replaced marriage among young people is a bit startling. This confirms Bumpass et al=s (1991) finding that while overall union formation among young adults has remained relatively constant, it has shifted from marriage to cohabitation.

B *Figure 2 here* B

Again, though, these overall figures obscure deeper shifts in union formation. Table 2 provides information on a number of union characteristics across the two samples. As a first union, very few young adults marry, with the percentage declining by more than half from 1987-88 to 2001-02. Of these young marriages, the proportion ending in separation or divorce increased by about 25%. As suggested in the figures, more young adults are cohabiting as a first union, but interestingly, this first cohabitation has also shifted in composition, as fewer are ending in marriage. By the start of the 21st century, less than 7% of young adults had a premarital first cohabitation, representing only about 16% of first cohabitations (6.7/42.7=15.7), down from over a third of first cohabitations ending in marriage in the late 1980s (9.4/25.8=36.4).

B *Table 2 here* B

While the proportion of 19-25 year olds who had one premarital cohabitation decreased slightly, the proportion who had one nonmarital cohabitation doubled from 12% to 25%. At both times, about half of those who had one nonmarital cohabitation were currently cohabiting, so though it is possible that some of these will end in marriage, current cohabitations do not account

for the differing proportion of premarital cohabitations over time. The proportion of first cohabitations not ending in marriage increased from 64% in 1987-88 (16.4/25.8=63.6) to 84.3% in 2001-02 (36/42.7=84.3). Further, a far greater number of young adults are experiencing more than one cohabitation. Less than 5% of the earlier sample had more than one cohabitation, and only 3% had multiple cohabitations and never married, representing over 75% of multiple cohabitors (3.3/4.3=76.7). By the start of the 21st century, over 10% had more than one cohabitation, with even more multiple cohabitators not marrying (9.1/10.8=84.3). A quarter of all cohabitors had experienced multiple cohabitations (10.8/42.7=25.3), up from 17% in the earlier sample (4.3/25.8=16.6). If experiencing a cohabitation not ending in marriage represents a lower commitment to marriage, more nontraditional attitudes, inability to commit, or difficulty in solving relationship problems, as some have theorized, then even those who later marry may have a high risk of divorce. This may translate into higher proportions of the population with marital instability and, if these cohabiting unions include children or these young adults later have children within marriage, higher proportions of children experiencing broken families.

With these changes in the composition and nature of cohabitation, one might expect that the duration of cohabitation has changed as well, though this does not appear to be the case overall. Regardless of cohabitation type, cohabitations at both points in time averaged about a year in duration, with those who had only one nonmarital cohabitation that is still ongoing averaging almost two years. The mean duration of all cohabitations has increased only by about a month and a half in the fifteen years between surveys, though for those who had only one premarital cohabitation, it has increased almost three months. For those who had multiple cohabitations not ending in marriage and are currently cohabiting, their first cohabitation has become about 2 months longer.

The changes in cohabitation have also affected marriage patterns. Fewer young adults marry, but more marriages involve cohabitation in some way. Over half of all marriages among today=s young adults involve at least one partner who had ever cohabited (though not necessarily with their spouse), up almost 20% from the late eighties. In the earlier time period, a little over one-third had cohabited prior to marriage, the vast majority of whom had cohabited only with their spouse. Fifteen years later, almost half of all those who had married had cohabited with their spouse, but far lower percentage had cohabited with only their spouse. About 14% of all marriages preceded by cohabitation involved cohabitation with a partner other than the spouse (5.6/39.6=14.1) in 1987-88, increasing to over a fourth fifteen years later (16.2/56.9=28.5). As suggested earlier, this may have implications for the stability of these marriages.

It has been well documented that those who cohabit prior to marriage have an increased risk of marital dissolution. However, much of this earlier work did not distinguish between different types of cohabitation; i.e., whether the individual cohabited only with their spouse or with others. Failing to do so hide some interesting distinctions. In the NSFH, 13% of those who married without prior cohabitation separated or divorced compared to 19% of who had cohabited. In the Add Health survey, on the other hand, there is little difference in the proportion who had separated or divorced by whether they had ever cohabited or not, with about one-fifth separating or divorcing. While there is no real increase between surveys in the proportion who had separated or divorced among cohabitors as a whole, the proportion of noncohabitors whose marriage dissolved exhibited an increase of nearly 8% by 2001-2002, 1.5 times the proportion in the late 1980s. In both samples, premarital cohabitors, including those who cohabited with someone other than their spouse, had a lower proportion of marital dissolution than those who did not cohabit premaritally, suggesting that premarital cohabitation among young adults is

actually good for marital stability. Except for those who cohabited multiple times but not with their spouse (a category which accounts for a much larger proportion in the Add Health sample than the NSFH sample), cohabitors appear to have become less likely to divorce over time.

There has been no change in the age pattern at first marriage over the past fifteen years, while the average age for all cohabitations has increased by less than half a year. The age at first cohabitation among those who had only one nonmarital cohabitation exhibited about a one year increase, and the mean age at first cohabitation among those who had more than one cohabitation and no marriages declined by about a year. Thus, despite the shift in first union from marriage to cohabitation, young adults on the whole are delaying the entrance into coresidential unions.

Cohabitation, Marriage, and Fertility

Accompanying these dramatic shifts in union formation have been shifts in patterns of fertility among young adults, detailed in Table 3. Most obvious is the decreasing proportion of 19-25 year-olds with children, concordant with a rising age at first birth. However, though a smaller percentage have children, there has been a slight increase in those having a birth outside of marriage, as expected from declining rates of marriage among this age group. The large rise in cohabitation, combined with a slight rise in nonmarital fertility, has translated into a greater proportion of young adults having children either prior to or during cohabitation, with an increase of about 5% of the 15 year period. However, the total percentage of the population having a child during cohabitation has remained fairly constant over this time period, and thus the proportion of all nonmarital births that are attributable to cohabitation has actually declined from about one-third to one-fourth. This contradicts Bumpass & Lu=s 2000 finding that part of the rise in nonmarital fertility is attributable to a rise in fertility within cohabiting unions, though they were looking at a much broader age range. As nonmarital fertility has become more

common, young adults in particular may feel less pressured to be in a coresidential union, especially in a situation where other family members may discourage forming a union so young or solely because of a pregnancy. The declining social stigma may also translate into greater opportunities for those who had a child nonmaritally to later form a relationship with someone other than the biological parent of the child. It has also been documented that the age pattern of nonmarital fertility has continued to shift to older ages (Ventura & Bachrach 2000), and it may be this group that is particularly likely to have their births in stable partnerships and cohabiting unions.

B *Table 3 here* B

The relationship between nonmarital fertility and marriage has also changed, as fewer individuals with a nonmarital birth later go on to marry. The proportion of young adults who had a nonmarital birth (some of which were in cohabiting unions) and subsequently married has decreased by over 10%; however, as nonmarital fertility has increased and marriages have been delayed, more marriages among this age group are preceded by a nonmarital birth. Young adults who have a child may be less likely to date casually and form more serious unions. A similar pattern presents itself in regards to births in cohabiting unions. Fewer of these cohabiting unions with births are transitioning into marriage, though again more marriages are preceded by a cohabiting birth. Both of these trends are consistent with rising levels of nonmarital births and cohabitation but fewer and delayed marriages.

While about one-third of cohabiting births occur to unions that later end in marriage at both time periods, the overall decline in cohabitations ending in marriage among this group has also translated into other changes. Though the proportion of cohabiting births occurring to those with only one nonmarital cohabitation has declined, the majority of such births in 1987-88 were

to unions that were still intact at the time of survey. By 2001-2002, nearly all such births were to unions that had ended already. Similarly, as more people have experienced multiple cohabitations, the percentage of all cohabiting births by cohabitation status has shifted, with births among those with two or more cohabitations increasing over 10% to account for nearly one-third of all cohabiting births by the turn of the 20th century, with a declining proportion of those unions still intact. Thus, more children born into cohabiting unions are not residing with both parents for an extended period of time, as the fragility of these unions translate into more children experiencing the breakup of their biological parents= union. It should be noted, though, that with far more young adults cohabiting, the percentage of cohabiting unions in which children are born has generally declined, with the exception of cohabitations ending in marriage.

Multivariate Analyses

Union Formation

To determine whether the influences on union formation among young adults have changed over time, I used logistic regression to predict first union type for Wave 1 of the NSFH and Wave 3 of Add Health. Because these are different samples of very different sizes, the magnitude of the odds ratios cannot be directly compared; rather, what should be taken from this analysis is whether various sociodemographic characteristics influence the odds of union formation in the same fashion (measured by magnitude and significance) at both waves. I first examine the odds of forming any union, followed by multinomial logistic regression determining type of first union (cohabitation not ending in marriage, premarital cohabitation, and marriage) where the omitted category is forming no union.

B *Table 4 here* B

Table 4 presents these odds ratios, contrasting the NSFH and Add Health. The first two

columns show the results for predicting the formation of any coresidential union. Generally, there appears to be no change in the likelihood of union formation across time for the covariates. Of all independent variables, only the parental living status variables differ across waves, with young adults who did not live with both parents more likely to form a union in the later sample. This difference may be due to measurement issues, as parental family status is indexed retrospectively to age 15 for the NSFH but is measured as current parental family status at wave 1 for Add Health and thus represents a broader range of ages. It may also be the case that young adults in nontraditional family settings have become increasingly likely to enter into serious (or perhaps not so serious) coresidential unions as society as become increasingly acceptable of nonmarital sexual activity and cohabitations.

The next set of odds ratios break down overall first union formation into three categories: nonmarital cohabitation, premarital cohabitation, and marriage. As with overall union formation, there appears to be little change between surveys as to the predictors of union type. Overall, for nonmarital cohabitations, there are virtually no differences across samples. Having a nontraditional family structure as an adolescent increases the odds of having a nonmarital cohabitation but is generally only significant for the Add Health sample. Being foreign born significantly decreases the odds of a nonmarital cohabitation only in Add Health. The sampling procedures of Add Health suggest that the composition of the foreign born population differs from that of the NSFH in targeting different nationalities. Additionally, the foreign born in the Add Health migrated during childhood or adolescence and thus are perhaps more likely to assimilate, while the foreign born in the NSFH can have immigrated at any age. Other than these differences, sociodemographic variables generally are in the expected directions and are consistent across surveys.

There are a few minor differences in predicting premarital cohabitation. High levels of parental education are significantly associated with a lower likelihood of premarital cohabitation in Add Health but not in the NSFH. As the age at first marriage has increased, well-off young adults may be increasingly likely to postpone serious unions; the delay in marriage might be most pronounced among those with the most to lose. Though insignificant, adolescent parental status background effects differ across surveys, with living with a single mother decreasing the odds of premarital cohabitation in 1987-1988 but increasing the odds in 2001-2002. Conversely, living with a single father increases the odds in 1987-1988 but has no effect in 2001-2002. Foreign born young adults are significantly less likely to have a premarital cohabitation only in the earlier sample, while being kicked out of the parental home significantly increases the odds only for the later sample.

Finally, there are few differences for marriage as first union. Living in a two-parent stepfamily as an adolescent significantly increases the odds of marriage as a first union for Add Health but is insignificant and in the opposite direction for the NSFH. Young adults born outside of the US have lower odds of marriage in the 1987-1988 period but have higher odds in the 2001-2002 period. Parental welfare receipt, as a measure of childhood poverty, increases the odds of marriage as a young adult for the later sample.

The rising prevalence of cohabitation combined with the decreased likelihood of marriage among cohabitors increases the exposure to forming more than one cohabitation, and as multiple cohabitations have more common, the sociodemographic profile of multiple cohabitors may have changed. To examine the relationship between multiple cohabitations and sociodemographic variables, Table 5 predicts the likelihood having more than one cohabitation among those who had ever cohabited. Note that the sample sizes are smaller than the full population analyzed

earlier, and the sample size of the NSFH is particularly small, which may affect significance.

B *Table 5 here* B

As shown by the models, it is relatively difficult to predict which individuals who cohabited once will go on to cohabit again before or without marrying, especially among the NSFH sample (though this is likely due in part to the smaller sample size). In both samples, the likelihood of having multiple cohabitations increases with age, reflecting longer exposure. Multiple cohabitations are also more likely among those with nontraditional family structures, though this is only significant for those in a stepfamily and only in the Add Health sample. The foreign born in the NSFH sample are more likely to cohabit more than once, while those in the Add Health sample are less likely; as mentioned before, this perhaps reflects sample differences in composition. In the later sample, young adults who were kicked out of the parental home and those who had a birth under age 18 are more likely to cohabit multiple times. This may reflect difficulty in forming long-lasting relationships and rushing into unwise relationships. Finally, college attendees have lower odds of having multiple cohabitations (though only in the Add Health sample), likely because of living in communal college settings such as dorms or the general avoidance of very serious relationships in the college years.

Family Behaviors

As the descriptive statistics also showed differences in fertility behaviors, Table 5 demonstrates the results of logistic regressions predicting the likelihood of having a nonmarital birth, the likelihood of marrying after a nonmarital birth, the likelihood of having a cohabiting birth among cohabitors, and the likelihood of marrying after a cohabiting birth.

B *Table 6* B

As before, the discussion here will focus on differences in significance and direction

across samples rather than differences in magnitude. There are more such differences across waves for the fertility and related behaviors than for the union formation behaviors examined above, demonstrating increasing selectivity in who has children concurrent with the rising age at first birth. As more young adults are delaying entrance into parenthood, the profile of early parents becomes more skewed to those from disadvantaged backgrounds. Focusing first on the likelihood of nonmarital births, there are more significant predictors among the young adults in the Add Health sample than in the NSFH. Compared to whites, all minorities except Asians are more likely to have an nonmarital birth, though being Hispanic is insignificant in the NSFH sample. Parental education is also differently related to nonmarital fertility across samples; those whose parental education is missing are significantly more likely to have a birth outside of wedlock only in the NSFH, while those with high levels of parental education are significantly less likely to have a nonmarital birth only in Add Health. As expected, those who had spent time in a nontraditional family as an adolescent are also more likely to have a nonmarital birth, though living in stepfamily, with a single mother, or some other family type is significant only for the later sample and living with a single father is significant only for the earlier sample. Parental welfare receipt and being kicked out of the parental home also increase the odds in both samples but is significant only for Add Health. Also only significant for the young adults in the later sample are college attendance and religiosity (measured as frequency of religious service attendance), both of which are associated with decreased likelihood of nonmarital fertility. Finally, full-time employment significantly encourages nonmarital fertility for the more recent sample, while it is insignificant but in the opposite direction for the older sample. This might reflect changes in welfare rules that require mothers to work to receive benefits.

The next model predicts the odds of marrying among those who had a nonmarital birth;

note the reduced sample sizes, particularly for the NSFH. For both the NSFH and the Add Health, relatively few variables are associated with the likelihood of marrying after a nonmarital birth, and there are few differences in significance across models. It appears that young adults with highly educated parents have become significantly less likely to marry after having a child outside of wedlock. More religious young adults were more likely to marry after a nonmarital birth than stay single in the late 1980s but by the turn of the 21st century there is no significant relationship between frequency of religious service attendance and the likelihood of marriage among those with nonmarital fertility. These changes likely reflect decreasing pressure to marry due the increasing acceptability of fertility outside of wedlock and perhaps the recognition that early marriers face a higher risk of later marital dissolution.

The third models focus on the likelihood of having a birth while cohabiting; the sample is restricted to cohabitors. Although there are several insignificant variables that change direction across the surveys, only two independent variables show significant changes. Older young adults are more likely to have had a child during a cohabiting union in the Add Health sample, which supports the earlier contention that the unexpected decrease in the proportion of nonmarital births due to cohabitation between surveys might reflect both the shift to older ages of fertility and older ages of cohabitors, who are perhaps more likely to have planned fertility in cohabiting unions. Lastly, those with very well-educated parents are less likely to have a child while cohabiting; their unions might be most likely to be premarital, and if a pregnancy does occur, they might be most likely to legitimize before the bith.

Finally, for the small numbers who had a child while cohabiting, I ran models predicting the odds of subsequent marriage. Though there are differences in variable significance across the two surveys, the small sample size of the NSFH likely precludes any variables reaching

significance, and the results should be taken with a grain of salt. As such, only those variables that are both significant and change in direction are discussed here. In the later survey, Hispanics are now less likely to marry after a cohabiting birth, though this may represent differences in the composition of the Hispanic population across samples. Further, where there was no relationship between age and the likelihood of marrying after a cohabiting birth in the late 1980s, older young adults have become more likely to marry. Lastly, those with highly educated parents are less likely to marry after a cohabiting birth in the Add Health survey, whereas they were more likely for the NSFH population.

Conclusion and Discussion

This paper has documented that overall coresidential union formation among young adults has increased over the past fifteen years, with continued trend away from marriage towards cohabitation as well as a change in the nature of cohabitation, away from cohabitation as a precursor to marriage to cohabitation as a union in itself. In the late 1980s, most individuals who had cohabited had only one cohabitation, the majority of which ended in marriage. By the early 21st century, though, far fewer cohabitors had only one cohabitation and less than a fifth of those with only one cohabitation had married their partner. Moreover, the proportion who had cohabited with more than one partner had doubled over this time period.

In addition to union changes, fertility behaviors have changed as well, particularly in relation to cohabitation and marriage. Fewer young adults are having children, though slightly more are doing so outside of marriage. More cohabiting unions involve children, but a smaller proportion of nonmarital births are births in cohabiting unions. And although more marriages are preceded by a nonmarital or cohabiting births, fewer young adults with either a nonmarital birth or a cohabiting birth go on to marry.

To dig deeper into these shifts in the past two decades, I explored union formation and fertility in a multivariate setting. Despite the dramatic changes in cohabitation and marriage, it does not seem that union formation has become less selective over time. Generally, the characteristics that are significantly associated with nonmarital cohabitation, premarital cohabitation, and marriage remain significant and have the same relationship at both timepoints. The independent variables here, which have been shown in this and other work to affect union formation, do not explain the movement away from marriage towards cohabitation (particularly nonmarital cohabitation) among young adults as a first union. Rather, it seems likely that larger social trends are responsible. These shifts may in turn have consequences of their own in terms of later union and family stability, given that more marriages now include partners who have cohabited (not necessarily with each other) and include children born prior to the union (not necessarily the biological child(ren) of both partners). According to the descriptive statistics, marriages among those who had cohabited with someone other than their spouse (except for those with multiple nonmarital cohabitations but no premarital cohabitation) are more likely to end in separation or divorce. Children in these unions may suffer greater family instability than those born to parents who did not cohabit or who only cohabited with each other.

The findings here provide some clue as to where to situate cohabitation along the relationship spectrum, at least for young adults. Given that few of these cohabitations end in marriage, it seems that cohabitation does not function as a precursor to marriage. Nor are these unions, as they are are relatively shortlived and generally do not involve children, like first marriages. Rather, these unions seem to be just another form of being single Many of the relationships formed among young adults involve sexual activity, as well as spending a great deal of time together, sharing meals and other activities. For many, cohabitation may be a matter of

convenience or seem like a natural progression, with little forethought given to whether they plan to marry their partner. However, cohabitations that include children (about a quarter of all cohabitations at both timepoints, though fewer children are actually born during cohabitation among young adults by the early 21st century) may resemble remarriages and stepfamilies, with all of the difficulties of blended families (Cherlin 1992). Further investigation, comparing specific behaviors (such as sharing finances or costs, fertility behaviors, relationship quality, and the like) among cohabitors, daters, and married individuals and taking into account the presence of children, is warranted to confirm what has been suggested here from the descriptive data.

Unlike cohabitation and marriage, it does appear that fertility behaviors have become more selective over time. As more young adults are postponing fertility, the population of young unmarried parents has become increasingly comprised of those from disadvantaged backgrounds, including racial minorities, those from nontraditional family backgrounds, and those whose family experienced poverty. Thus, children born to young unmarried parents now are more likely to be born into poor and unstable families than in the late 1980s. However, there appears to be little change over time in which young adults with nonmarital and cohabiting births later marry, though fewer are marrying.

As more children will experience the cohabiting unions of the parents, the instability of such unions dramatically increases the family instability these children will be exposed to (Raley & Wildsmith 2004), and family instability is strongly associated with negative child outcomes (Wu 1996; Wu & Thomson 2001). The potential implications of the dramatic rise and change in the nature of cohabitation and decline in marriage combined with the rising percentage of marriages preceded by nonmarital and cohabiting births over the past fifteen years (all of which are likely to continue) are thus unknown but merit further inquiry than provided in the descriptive

analyses herein.

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Table 1. Descriptive Statistics from the NSFH, W1 (1987-1988) and Add Health, W3 (2001-2002), weighted

Variable		NSFH	Add Health
Mean Age		21.8	21.8
Female		49.9%	48.7%
Race			
	Non-Hispanic White	73.9%	68.6%
	Non-Hispanic Black	13.5%	15.4%
	Hispanic	10.5%	11.4%
	Other	2.1%	B
	Indian	B	3.7%
	Asian	B	0.8%
Parent=s Education			
	Missing	9.0%	9.6%
	Less than High School	18.9%	10.6%
	High School/GED	38.0%	35.6%
	Some College	13.9%	12.5%
	College Graduate	20.3%[1]	21.0%
	Professional/Graduate	B	10.7%
Parental Structure			
	Both biological parents	66.5%	56.8%
	Two-parent stepfamily	10.8%	15.2%
	Single mother	16.4%	18.6%
	Single father	1.0%	2.8%
	Other	5.3%	6.5%
Foreign Born		8.4%	5.8%
Kicked out of or left the parental home		2.5%	11.1%
Family received welfare		13.9%	9.4%
Had a child under 18		5.5%	3.5%
Religious Service Attendance			
	Never	24.7%	25.2%
	Less than once a month	31.1%	17.6%
Once a month, less than once a week Once a week or		20.0%	19.4%
	more	24.2%	37.8%
Ever attended college		43.5%	54.4%
Ever worked full-time		63.2%	79.3%
N		1962	13135

May not total 100% due to rounding.
[1] For the NSFH, the college graduate category includes those with professional/graduate education as well.

Figure 1. Union Formation Among Young Adults 19-25

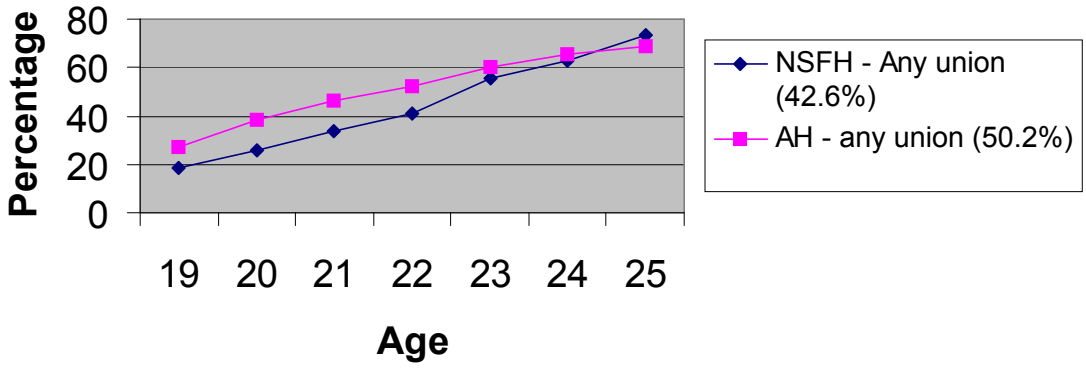

Figure 2. Ever Married & Ever Cohabited Among Young Adults 19-25

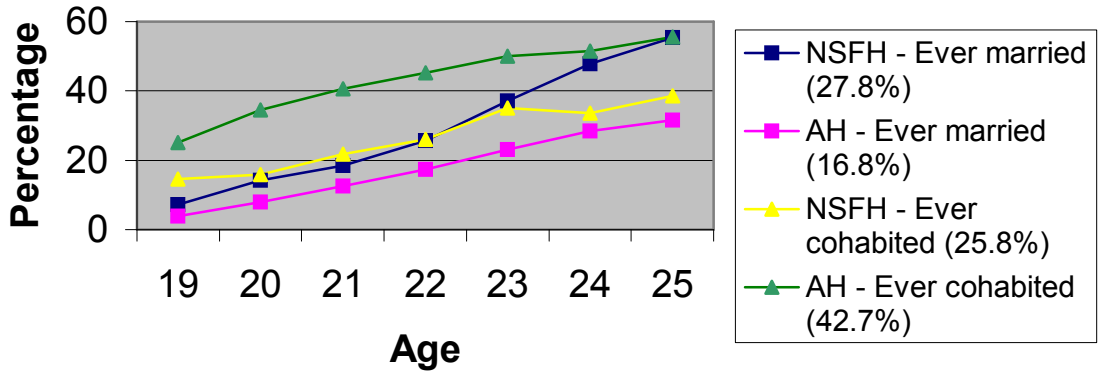

Table 2. Union Status Descriptives

	NSFH W1	Add Health W3
Any union	42.6%	50.2%
Ever married	27.8%	16.8%
Of married, separated/divorced	15.3%	19.8%
Ever cohabited	25.8%	42.7%
First union: cohabitation	25.8%	42.7%
Nonmarital	*16.4%*	*36.0%*
Premarital	*9.4%*	*6.7%*
First union: marriage	16.8%	7.4%
Cohabitation Status		
No cohabitations	74.2%	57.4%
One premarital cohabitation	9.4%	6.7%
One nonmarital cohabitation	12.0%	25.1%
Not currently cohabiting	*6.1%*	*12.7%*
Currently cohabiting	*5.9%*	*12.5%*
At least one nonmarital cohabitation with premarital cohabitatons	1.0%	1.7%
Two or more nonmarital cohabitations	3.3%	9.1%
Not currently cohabiting	*2.2%*	*4.0%*
Currently cohabiting	*1.1%*	*5.1%*
First cohabitation average duration		
All cohabitations	15.0 mos	16.5 mos
One premarital cohabitation	13.4 mos	16.3 mos
One nonmarital cohabitation	17.0 mos	17.4 mos
Not currently cohabiting	*12.2 mos*	*12.5 mos*
Currently cohabiting	*21.5 mos*	*22.1 mos*
At least one nonmarital cohabitation w/ premarital cohabitatons	13.0 mos	14.8 mos
Two or more nonmarital cohabitations	13.2 mos	13.0 mos
Not currently cohabiting	*12.1 mos*	*12.4 mos*
Currently cohabiting	*14.7 mos*	*16.6 mos*
Premarital Cohabitation		
Ever cohabited prior to marriage	39.6%	56.9%
Cohabited with spouse prior to marriage	37.6%	48.2%
Cohabited only with spouse	85.6%	67.5%
Marriage by Cohabitation Status		
No cohabitation	60.4%	43.1%
One premarital cohabitation	33.9%	38.4%
One nonmarital cohabitation	0.8%	4.4%
At least one nonmarital cohabitation with premarital cohabitation	3.6%	9.8%
Two or more nonmarital cohabitations	1.2%	2.0%

Age at first union		
All Marriages	19.7	19.7
Marriages not preceded by cohabitation	20.2	20.5
All cohabitations	19.9	20.3
One premarital cohabitation	19.6	19.4
One nonmarital cohabitation	19.3	20.1
At least one nonmarital cohabitation w/ premarital cohabitations	18.3	18.9
Two or more nonmarital cohabitations	18.8	17.7
Separated/Divorced by Cohabitation Status		
Never cohabited	12.9%	20.3%
All cohabitations	18.9%	19.4%
One premarital cohabitation	18.4%	16.7%
One nonmarital cohabitation	62.0%	53.7%
At least one nonmarital cohabitation w/ premarital cohabitations	12.5%	14.4%
Two or more nonmarital cohabitations	23.7%	21.8%

May not total to 100% due to rounding.

NSFH: * Duration of one premarital cohabitation is significantly different from one nonmarital cohabitation at p>.05; # duration of one nonmarital cohabitation is significantly different from first cohabitation of two or more nonmarital cohabitations

AH: * Duration of one premarital cohabitation is significantly different from first cohabitation of at least one nonmarital cohabitation and one premarital cohabitation at p<.05; # duration of one nonmarital cohabitation is significantly different from first cohabitation of two or more nonmarital cohabitations and from first cohabitation of at least one nonmarital cohabitation and one premarital cohabitation at p<.05

Table 3. Fertility, Cohabitation, and Marriage

	NSFH W1	AH W3
Had a child	24.4%	18.7%
Had a nonmarital birth	11.1%	13.9%
Had a child prior to or during cohabitation	6.0%	11.3%
Had a child during cohabitation	3.7%	3.3%
Cohabiting births as a percentage of nonmarital births	33.3%	23.7%
Cohabitors		
Had a child prior to or during cohabitation	23.1%	26.5%
Had a child during cohabitation	14.4%	7.9%
Births and marriage		
Had nonmarital birth and married	34.9%	22.6%
Marriages preceded by nonmarital birth	13.9%	18.6%
Had cohabiting birth and married	43.1%	36.9%
Marriages preceded by cohabiting birth	5.8%	7.3%
Cohabiting births by cohabitation status		
One premarital cohabitation	34.7%	31.4%
One nonmarital cohabitation	41.4%	34.9%
Not currently cohabiting	*12.7%*	*34.2%*
Currently cohabiting	*28.7%*	*0.7%*
At least one nonmarital cohabitation w/ premarital cohabitations	6.7%	3.8%
Two or more nonmarital cohabitations	17.2%	29.8%
Not currently cohabiting	*7.2%*	*14.3%*
Currently cohabiting	*10.0%*	*15.7%*
Cohabitation status by having a birth		
One premarital cohabitation	13.7%	15.8%
One nonmarital cohabitation	12.8%	4.7%
Not currently cohabiting	*7.7%*	*9.1%*
Currently cohabiting	*18.1%*	*0.2%*
At least one nonmarital cohabitation w/ premarital cohabitations	19.2%	7.8%
Two or more nonmarital cohabitations	24.6%	11.1%
Not currently cohabiting	*11.8%*	*11.9%*
Currently cohabiting	*34.7%*	*10.3%*

Table 4. Odds Ratios Predicting Union Formation Among Young Adults 19-25 in the NSFH W1 (1987-88) and in Add Health W3 (2001-2002)

	NSFH	Add Health	NSFH - First Union Type			Add Health - First Union Type		
	Any Union	*Any Union*	*Nonmarital Cohabitation*	*Premarital Cohabitation*	*Marriage*	*Nonmarital Cohabitation*	*Premarital Cohabitation*	*Marriage*
Female	2.597***	1.994***	2.045***	2.352***	3.504***	1.837***	3.168***	2.116***
Race *(default is white)*								
Black	0.187***	0.640***	0.389***	0.124***	0.091***	0.745***	0.274***	0.488***
Hispanic	0.573**	0.750*	0.508*	0.696	0.860*	0.722*	0.606*	0.950
Asian	–	0.644*	–	–	–	0.680	0.643	0.528*
Indian	–	1.334	–	–	–	1.496	0.941	0.662
Other	0.907	–	0.942	1.109	0.759	–	–	–
Age	1.571***	1.393***	1.401***	1.718***	1.680***	1.230***	1.695***	1.713***
Parental Education *(default is HS)*								
Missing	1.163	0.842	1.103	0.718	1.629	0.823	1.055	0.799
No HS	0.965	1.214	0.817	0.810	1.276	1.205	1.090	1.323
Some College	0.802	0.947	0.818	0.803	0.768	0.895	1.102	1.092
College[1]	0.628**	0.801**	0.604*	0.677	0.628*	0.833*	0.559***	0.830
Professional	–	0.727**	–	–	–	0.848	0.536**	0.422***
Parental Living Status *(default is both bio parents)*								
Two parent stepfamily	1.197	1.550***	1.525*	1.583	0.778	1.628***	1.337	1.407*
Single mother	0.958	1.183*	1.283	0.876	0.722	1.294**	1.146	0.751
Single father	1.993	1.517*	2.959	3.302	0.714	1.752***	0.987	0.836
Other	1.286	2.127***	1.832	1.919	0.666	2.381***	1.596	1.538
Foreign Born	0.640	0.855	0.948	0.417*	0.497*	0.669*	0.871	1.572*
Kicked out of parent's home	1.695	1.889***	2.279*	1.792	0.753	2.132***	1.488*	0.904
Parents received welfare	1.110	1.122	1.182	1.235	0.956	1.092	0.913	1.410*
Had a birth under 18	2.822***	4.283***	2.264**	4.292***	3.031***	4.095***	6.195***	4.238***
Frequency of religious service attendance	0.902*	0.925**	0.701***	0.809**	1.213**	0.858***	0.959	1.351***
Attended college	0.495***	0.356***	0.606***	0.411***	0.451***	0.365***	0.248***	0.428***
Ever worked full-time	1.483***	2.138***	1.661***	1.550*	1.336	2.176***	2.069***	2.000***
N	1962	13135		1962			13135	

[1] For the NSFH, the college graduate category includes those with professional/graduate education as well.

Table 5. Odds Ratios Predicting Multiple Cohabitations Among Young Adults 19-25 Who Had Ever Cohabited in the NSFH W1 (1987-88) and in Add Health W3 (2001-2002)

	NSFH	Add Health
Female	1.156	1.050
Race *(default is white)*		
Black	0.715	1.014
Hispanic	0.505	0.694*
Asian	–	0.977
Indian	–	0.668
Other	0.371	–
Age	1.245***	1.124***
Parental Education *(default is HS)*		
Missing	0.865	1.034
No HS	1.666	0.957
Some College	0.718	1.145
College[1]	1.225	1.100
Professional	–	1.070
Parental Living Status *(default is both bio parents)*		
Two parent stepfamily	1.035	1.397**
Single mother	1.238	1.183
Single father	1.676	1.255
Other	2.290	1.542
Foreign Born	2.512*	0.614*
Kicked out of parent's home	1.403	1.885***
Parents received welfare	1.377	1.038
Had a birth under 18	0.853	1.354*
Frequency of religious service attendance	0.939	0.939
Attended college	0.607	0.564***
Ever worked full-time	1.176	1.188
N	693	5476

[1] For the NSFH, the college graduate category includes those with professional/graduate education as well.

Table 6. Odds Ratios Predicting Nonmarital Fertility and Marriage Among Young Adults 19-25 in the NSFH W1 (1987-88) and in Add Health W3 (2001-2002)

	NSFH				Add Health			
	Nonmarital Birth	*Marriage after Nonmarital Birth*	*Birth while Cohabiting*	*Marriage after Cohabiting Birth*	*Nonmarital Birth*	*Marriage after Nonmarital Birth*	*Birth while Cohabiting*	*Marriage after Cohabiting Birth*
Female	3.727***	0.801	1.969**	0.481	2.688***	1.134	2.066***	1.021
Race *(default is white)*								
Black	6.105***	0.259***	2.806***	0.493	2.308***	0.292***	1.718**	0.144***
Hispanic	1.540	1.002	3.239**	1.716	1.546*	0.648	1.757*	0.235***
Asian	–	–	–	–	1.006	1.906	1.371	13.562**
Indian	–	–	–	–	2.946***	0.778	2.183	–
Other	3.324*	0.785	1.453	–	–	–	–	–
Age	1.091*	1.268***	1.025	0.988	1.179***	1.325***	1.137**	1.266*
Parental Education *(default is HS)*								
Missing	1.930*	1.176	1.963	1.352	0.785	0.772	1.277	0.970
No HS	1.283	1.014	0.935	0.633	1.238	0.967	1.366	1.872
Some College	0.929	0.782	1.253	1.206	1.065	1.159	0.890	1.165
College	0.709	2.134	1.082	2.551	0.650***	0.918	0.662	0.410
Professional	–	–	–	–	0.520**	0.121***	0.222*	0.345***
Parental Living Status *(default is both bio parents)*								
Two parent stepfamily	1.419	0.619	0.919	0.715	1.274*	0.853	1.265	0.474
Single mother	1.232	0.651	0.620	0.478	1.322**	0.764	1.152	0.629
Single father	2.093*	1.056	1.677	1.316	1.268	0.489	0.842	0.483
Other	1.254	0.984	0.592	1.243	2.443***	1.318	1.325	0.701
Foreign Born	0.595	0.381	0.853	–	0.643	1.242	0.717	1.232
Kicked out of parent's home	1.618	0.763	1.995	0.444	1.428***	0.822	1.020	0.530
Parents received welfare	1.374	0.837	1.067	0.470	1.266*	1.469	0.880	1.795
Frequency of religious service attendance	0.905	1.341*	0.884	1.376	0.935*	1.121	0.984	1.201
Attended college	0.299	0.681	0.373***	0.877	0.320***	0.804	0.414***	1.137
Ever worked full-time	0.812	1.006	1.088	0.780	1.554***	0.804	0.788	0.506
N	1962	364	693	108	13135	1819	5446	445

[1] For the NSFH, the college graduate category includes those with professional/graduate education as well.