HHS Public Access

Author manuscript

Popul Res Policy Rev. Author manuscript; available in PMC 2016 April 01.

Published in final edited form as:

Popul Res Policy Rev. 2015 April 1; 34(2): 161–177. doi:10.1007/s11113-014-9341-x.

Teenage Cohabitation, Marriage, and Childbearing

Wendy D. Manning and

Department of Sociology and Center for Family and Demographic Research, 223 Williams Hall, Bowling Green State University, Bowling Green, Ohio 43403, Telephone: (419) 372-2850, Fax: (419) 372-8306, wmannin@bgsu.edu

Jessica A. Cohen

St. Mary's University, Sociology Department, 202 Charles Francis Hall, San Antonio, Texas 78228-8579, Telephone: 210-431-2299 Ext 4400, jcohen8@stmarytx.edu

Abstract

Cohabitation is an integral part of family research; however, little work examines cohabitation among teenagers or links between cohabitation and teenage childbearing. Drawing on the National Survey of Family Growth (2006–10), we examine family formation activities (i.e., cohabitation, marriage, and childbearing) of 3,945 15–19 year old women from the mid 1990s through 2010. One-third (34%) of teenagers cohabit, marry, or have a child. Teenage cohabitation and marriage are both positively associated with higher odds of having a child. The vast majority of single pregnant teenagers do not form a union before the birth of their child; only 22% cohabit and 5% marry. Yet most single pregnant teenagers eventually cohabit, 59% did so by the child's third birthday and about 9% marry. Cohabitation is an important part of the landscape of the adolescent years, and many teenage mothers described as "single mothers" are actually in cohabiting relationships.

Keywords

Cohabitation; Marriage; Adolescent; Childbearing; Single Mothers

---

Cohabitation has become an increasingly ubiquitous part of the early adult family life course and has been linked to increases in nonmarital fertility (Goodwin, Mosher and Chandra 2010; Kennedy and Bumpass 2008; Musick 2008). Although cohabitation is recognized as an important part of young adult family formation, the bulk of research has not explicitly considered cohabitation as a teenage activity. Extensive research has focused on teenage fertility (Santelli and Melnikas 2010), but little attention has focused on cohabitation as a relationship context for teenage fertility. It is likely that teenage cohabitation may be the result of different structural dynamics and hold a different meaning for teenagers than adults in their twenties and thirties. Thus, we consider teenage cohabitation separately from young adult cohabitation.

Drawing on a developmental perspective and data from the 2006–10 National Survey of Family Growth, we examine women's timing to first teenage cohabitation, marriage, and conception at 15 to 19 years of age from the late 1990s through early 2000s. We consider how time-varying union status indicators (single, cohabiting, and married) influence the

timing of first teenage fertile conception. We also examine how time-varying fertility measures influence the timing of teenage union formation. Finally, we determine the timing of union formation among pregnant single teenagers. It is important to assess the family formation activities of teenagers, as these decisions are setting the progression of their future family life (e.g., Crissey and Muller 2007; Manning, Giordano and Longmore 2008; Meier and Allen 2008; Raley et al. 2007). The family trajectories started in adolescence have ramifications for their subsequent family formation and well-being.

BACKGROUND

Teenage marriage and cohabitation

The age at first marriage has reached a historic highpoint, about 26.5 years for women and 29 years for men (U.S. Census Bureau 2011); however, some subgroups of Americans are not waiting until their mid to late twenties to marry. Recent work finds young men and women who marry early are more often religious, have prior pregnancies or births, experienced greater numbers of adolescent relationships, score poorly in terms of academic performance, have parents with early marriage experiences, and are from disadvantaged backgrounds (Amato et al. 2008; Carroll et al. 2007; Gaughan 2002; Raley et al. 2007; Ryan et al. 2009; Uecker and Stokes 2008). Unlike research on marriage among young adults, most studies of early marriage generally do not acknowledge that cohabitation may also be a predictor of this pathway to early marriage. An exception is that Uecker and Stokes (2008) find that cohabitation is positively associated with earlier marriage.

Given the median age at cohabitation is relatively young (22 years old) (Child Trends 2006; Manning, Brown, and Payne forthcoming); cohabitation is not restricted to just women in their twenties. Many studies have included age in their analyses of cohabitation, but do not specifically consider early cohabitation. Such studies often note the percentage who have cohabited or are currently cohabiting among different age groups (Chandra et al. 2005; Kennedy and Bumpass 2008), document variation in outcomes of cohabiting unions (Manning and Smock 1997), or examine differentials in the odds of cohabitation or marriage (Qian 1998; Xie et al. 2003). Yet, to date little work has focused on teenage cohabitation.

Based on a handful of studies the key correlates of teenage or early cohabitation appear to be disadvantaged background. Men and women who have weak community ties, low levels of religiosity, greater substance use, lower verbal ability, poorer relationships with parents, and disrupted childhood families experience higher odds of teenage or early cohabitation (Amato et al. 2008; Houseknecht and Lewis 2005; Meier and Allen 2008; Musick and Meier 2010; Ryan et al. 2009). While these are recently published studies and provide important insights, they draw on either select data sources, e.g., 8th grade girls in 1988 (Houseknecht and Lewis 2005), or use terminology to reference cohabitation that may not resonate with adolescents, e.g. the Add Health survey asks about cohabitation by referencing ‘marriage-like’ relationships. This wording may be problematic considering cohabitation in the teen years, rather than in the later twenties, is probably less aptly described as ‘marriage-like.’ An omitted feature of these studies of early cohabitation is attention to fertility, they do not consider how cohabitation and fertility are interconnected.

Teenage Fertility

Even though nearly all births (88.5%) to teenagers are born to unmarried mothers (Martin et al. 2013), cohabitation has not been fully integrated into work on teenage childbearing. This is surprising because among the general population births to cohabiting women are on the rise and represent two-fifths of all unmarried births (Kennedy and Bumpass 2011). Only a few recent studies focusing on teenage fertility acknowledge cohabitation in analysis of teenage fertility. There has been an increase in unmarried teenage mothers who were cohabiting from about one-third (35.1%) in 2002 to nearly half (45.6%) between 2006 and 2010 (Chandra et al. 2005; Martinez, Daniels, and Chandra 2012). A greater share of teenage mothers than older mothers had their child while cohabiting, in part because most births to teenagers occur outside of marriage (Martinez et al. 2012; Mincieli et al. 2007). Thus, many unmarried teenage mothers are not initially raising their children alone, requiring modifications of our understanding of teenage motherhood. Our work builds on these findings by considering the study of teenage union formation, specifically focusing on how teenage union formation influences the timing of teenage childbearing.

Prior research considers how union status influences fertility among a wide range of age groups (e.g., Manning and Landale 1996; Loomis and Landale 1994; Manning 2001; Musick 2002; Musick 2008). Taken together, prior research suggests that married women are more likely than cohabiting women to give birth, and cohabiting women have higher odds of giving birth than single women. Yet, no work has addressed the association between union status and fertility among teenagers.

To date little research has considered how teenage fertility is tied to subsequent relationship formation. Research linking union status and fertility evaluates whether mothers cohabit or marry in response to a pregnancy. Raley (2001) and Licther (2012) find that pregnant single mothers are increasingly cohabiting prior to the child's birth; however, such studies have been limited to examining the union status and fertility of women throughout their twenties or early thirties. One of the few studies that considers how teenage cohabitation is tied to subsequent relationship trajectories among teenage single, cohabiting, and married mothers uses a sample of disadvantaged parents involved in Head Start, a government program providing comprehensive education and health services to low income families (Eshbaugh 2008). She finds that about half of teenage mothers were living with or married to the father of their child about a year after the child's birth. By the child's third birthday, 40% spent some time cohabiting with the child's father. These descriptive findings showcase the potential importance of cohabitation among a disadvantaged sample of mothers and the dynamics of cohabiting living arrangements. Research using nationally representative data reports that teenage childbearing influence later marriage and divorce trajectories (Graefe and Lichter 2007), but does not included the role of cohabitation. Thus, there is no work showing how teenage fertility is related to subsequent relationship (cohabitation and marital) trajectories.

Current Investigation

The current study contributes to the existing research on teenage childbearing, cohabitation, and early union formation by jointly analyzing teenage family formation activities

(cohabitation, marriage, and childbearing). We investigate how teenage family formation events are linked by considering how time-varying indicators of union status influence fertility and how time-varying fertility measures are associated with union formation. A developmental perspective focusing on family formation of women throughout their teenage years provides a comprehensive lens on adolescence and a better understanding of young adult relationship trajectories. This study has implications for understanding the American family landscape because family formation activities of teenagers are setting the stage for their subsequent relationship and childbearing trajectories (e.g., Cohen and Manning 2010; Manning et al. 2008; Meier and Allen 2008; Raley et al. 2007).

Given early childbearing and cohabitation are associated with disadvantage, the models include key sociodemographic indicators that are related to early family formation. Young women from more disadvantaged backgrounds experience earlier parenthood, cohabitation, and marriage (Cavanaugh 2011; Meier and Allen 2008; Musick and Meier 2010). Delays in family formation occur among teens and young adults from more advantaged circumstances who are on track to pursue higher education. We include a proxy for socioeconomic status with the inclusion of mother's education. Youth from single parent or divorced families experience earlier timing of family formation (Cavanaugh 2011; Martinez 2012; Musick and Meier 2010; Ryan et al. 2009; Teachman 2004). Family background acts as indicator of economic resources and stress that are linked to earlier transitions to cohabitation and nonmarital fertility (Amato and Kane 2011). Race/ethnicity are associated with adolescent family formation patterns. African American and Hispanic youth experience higher rates of teenage fertility (Martinez 2013; Musick and Meier 2010) and lower odds of union formation (Meier and Allen 2009; Ryan et al. 2009; Uecker and Stokes 2008). Nativity status is also linked to earlier marriage with foreign born Mexican Americans experiencing younger ages of marriage (Choi and Seltzer 2009) and foreign-born Hispanics higher odds of teenage births (Manlove et al. 2013). Religiosity is associated with lower odds of teenage cohabitation and motherhood and higher odds of early marriage (Meier and Allen 2009; Uecker and Stokes 2008) as religiosity is an indicator of conservative attitudes (Pearce and Thornton 2007).

METHODS

Data and Sample

We use data from the 2006–2010 NSFG, conducted by the National Center for Health Statistics, which interviewed a national probability sample of 12,279 women aged 15 to 44. The 2006–2010 NSFG represents the first time the NSFG was fielded using a continuous design, meaning that the NSFG conducted interviews with respondents over a 4-year period (between 2006 to 2010), instead of completing interviewing in 8–12 months, as was the case for previous cycles. Interviewing for the 2006–2010 survey began in late June of 2006 and ended in June 2010 (a 48-month period). This continuous design allowed the NSFG to oversample teenage and minority groups; this feature of the NSFG, combined with its excellent fertility and union histories, makes these data especially useful for the current analyses of teenage union formation and childbearing behaviors.

Because the 2006–2010 NSFG was collected between 2006 and 2010, we restrict our sample to women who were aged 15 to 19 (teenagers) throughout the decade prior to these interview years (1996–2010). In other words, we examine the childbearing and union formation behaviors of women between the years 1996 and 2010, when they were teenagers. We also restrict the sample to women who respond to questions related to the start dates of their cohabitation and marriage histories. Thus, our overall sample includes 3,945 women aged 16 to 24 at the time of interview. For analyses examining union formation prior to age 24, after first teenage conception, we restrict our sample to the 477 mothers who were single (not cohabiting or married) when they conceived a child between 15 to 19 years of age. We end observations at age 25 because indicators of religiosity while growing up are limited to respondents age 25 and younger. The NSFG does not provide parallel childbearing and conception histories for men; due to these data limitations, we restrict analyses to women.

Measures

Dependent variables—We examine two dependent variables: the timing of respondent's first teenage union formation (cohabitation and marriage) and the timing of the first teenage conception that resulted in a live birth (fertile conception).

For the first dependent variable, the outcomes include the following: first married between ages 15 to 19 (n=91), first cohabited between ages 15 to 19 (n=866), and neither cohabited nor married between ages 15 to 19 (n=2,988). We predict respondent's first teenage union formation; thus, women who formed more than one cohabitation, or both cohabited and married between the ages of 15 to 19, are coded according to the type of first teenage union. We also measure union formation among the subset of women who were single (not married or cohabiting) teenagers when they conceived their first child (n=477). For this analysis responses are censored by the date of interview or age 24.

The second dependent variable focuses on the timing of the first fertile conception or in other words the timing of the pregnancy that lead to the first birth. Respondents are coded into two categories, those who had a fertile conception between the ages of 15 to 19 (n=730) and those who did not have a fertile conception between ages 15 to 19 (n=3,215). We limit our analyses to the timing of womens' first teenage conception.

Independent Variables: Union formation and fertile conception—Analyses predicting union formation include a time-varying fertile conception variable. Our analyses predicting teenage fertile conception focus on time-varying union status (single, cohabit, marry) as the main independent variable. Because union formation and fertility are inextricably linked, the time-varying covariates are important to determine causal ordering for teenage family formation.

Covariates—Because the NSFG does not provide education and employment histories of its female respondents, socioeconomic background factors include mother's education and family structure during childhood. Mother's education is divided into four categories: less than high school degree, high school degree, some college experience, and bachelor's degree earned or higher. Family background is measured with a variable determining family structure at age 14 and is coded into four categories: grew up in two biological or adoptive

parent household, lived with a biological mother/father and other father/mother figure, lived with biological mother/father and no other father/mother figure, and "other." Race /ethnicity and immigrant status are coded into the following five categories: white, black, native-born Hispanic, foreign-born Hispanic, and "other." Childhood religiosity is based on reported religious service attendance at age 14 and responses range from 1 to 5 (never, less than once a month, 1–3 times per month, once a week, and more than once a week).

Analytic Methods

We use survival analyses to examine the timing of union formation and fertile conception during the teenage years. First, we estimate life tables of the cumulative proportion of females who experience teenage cohabitation, marriage, and fertile conception. Second, we estimate discrete-time event history models predicting union formation and fertile conception using binomial and multinomial logistic regression. This analytic strategy requires the creation of person-month data and permits the inclusion of both fixed and time-varying covariates. We first estimate zero-order models for the focal independent variables (time-varying teen union formation and teen conception status), as well as for each baseline covariate. Next, all other covariates are included in multivariate (full) models.

RESULTS

Teenage Childbearing

Figure 1 shows that most teenagers do not enter motherhood; however, by age 20, a substantial minority (18%) of teenagers become mothers. Among teenage mothers, 57% conceived their first child before age 18. Most teenage parents have only one child; however, about 20% have given birth to more than one.

We find that three-fifths of pregnant teenagers (61%) are single when they conceive their first child (i.e., not living with a boyfriend or husband), over one-quarter (29%) are cohabiting, and 10% are married (results not shown). Further analyses indicated that higher order teenage conceptions and births, conceiving or giving birth to more than one child, more often occur in cohabiting or marital unions. We further our understanding of union status at time of conception and birth by examining what share of single pregnant teenage women cohabit *or* marry before the birth of their first child. Over one-fifth (22%) of pregnant single teenage women cohabit before the birth of their child and 5% marry. Taken together, two-fifths (42%) of unmarried, pregnant teenagers were cohabiting when they either conceived or gave birth to their first child (results not shown).

Table 1 presents the distribution of the variables for our analytic sample and Table 2 presents the logistic regression models predicting teenage fertile conception. The first model in Table 2 shows the bivariate discrete-time binomial logistic regression predicting teenage fertile conception. The time-varying union status variable indicates that women who marry during their teen years have significantly higher odds of teenage fertile conception than those who form no union. Teenage women who cohabit also have significantly higher odds of conception than single teenage women. Teenagers who marry have significantly greater odds (130% higher odds) of conceiving a child than those who cohabit (results not shown).

The second model presents the multivariate results. Net of the covariates, teenage union formation status remains significantly associated with teenage fertile conception. Teenagers who marry or cohabit have significantly higher odds of fertile conception than women who form no union during their teen years. Similar to the bivariate model, teenagers who marry have statistically higher odds of conceiving a child as teenage women who cohabit (results not shown). The second model also shows the remaining covariates are tied to teenage conception. Mother's educational attainment is significantly associated with the odds of teenage fertile conception. Teenagers whose mothers have not graduated from high school have greater odds and teens with college educated mothers have significantly lower odds of having a fertile conception than teens whose mothers earned a high school diploma. Teenagers raised in single parent or step-parent families experience greater odds of teenage conception. Race/ethnicity and nativity status are significantly associated with the odds of teenage conception, minority teens more often experience teenage conception than white-Non Hispanic teenagers.

Union Formation

Figure 2 shows the probability of union formation during the teen years. We find that by the time women turn twenty, over one-quarter (27%) cohabit. The probability of cohabitation increases with age, and the age distribution of cohabitation shows that about 35% of teenage cohabitors started cohabiting before they turned 18 and 65% between ages 18 and 19 (results not shown). Figure 2 indicates that 4% of teenagers have married by age 20. Among teenage women who form a union, the vast majority (88%) selected cohabitation. Even among teenagers who marry, 44% also cohabit, indicating cohabitation is a route to teenage marriage. In sum, the majority of teenagers do not form a union, but almost one-third do so by age 20.

The first model in Table 3 shows the bivariate discrete-time multinomial logistic regression predicting teenage union formation. Teenage women who have a fertile conception experience significantly higher odds of both marrying (700%) and cohabiting (479%) than women who do not have a fertile conception. Teenagers who have a fertile conception experience statistically similar odds of marriage compared to cohabitation as teenagers who do not conceive a child (results not shown).

The second model in Table 3 shows the multivariate results. Net of the other covariates, teenage union status remains significantly associated with teenage fertile conception. Teenagers who have a conception experience significantly higher odds of both marrying (986%) and cohabiting (446%) than teens who do not conceive. The odds of cohabiting or marrying are statistically similar (results not shown). The second model also shows that the remaining covariates are associated with teenage union formation. Mother's educational attainment is significantly associated with the odds of teenage union formation. Teenagers with highly educated mothers have significantly lower odds of cohabiting than teenagers whose mothers only earned a high school degree. Childhood religious service attendance is significantly associated with teenage union formation; as a teenager's religious service attendance increases, the odds of cohabitation decrease by 8%. Teenagers raised by their biological parent and a stepparent or in a single-parent home have higher odds of

cohabitation. Race/ethnicity and nativity status are significantly associated with the odds of teenage union formation. Black teenagers have 96% lower odds of marriage and 60% lower odds of cohabitation than white teenagers.

Teenage Childbearing and Subsequent Union Formation

The vast majority of pregnant single teenage mothers remain single prior to the birth of their child; only 22% cohabit and 5% marry prior to the child's birth (stated above); however, as Figure 3 shows, by the child's third birthday, the majority of teenage single mothers (63%) form a union (59% cohabit and 9% marry along with 5% both cohabit and marry). Thus, it is likely that many of these teenage mothers are not cohabiting or marrying the father of their child, but are eventually partnering (mostly within a cohabiting union).

We build on the life table analyses by using discrete-time multinomial logistic regression predicting union formation among teenage, single (at time of teenage conception) mothers (Table 4). We combine marriage and cohabitation because the sample size who marry is too low to merit separate analyses. The bivariate and multivariate results are quite similar, thus we only discuss the multivariate findings here. The full model shows that teenage single mother's age at first conception is not significantly associated with the odds of union formation, but is significantly associated with the odds at the zero order. The inclusion of mother's education and race/ethnicity explains the association between age at conception and union formation. Mother's educational attainment, religiosity, and family structure are not significantly associated with the odds of union formation among pregnant teenagers. Race/ethnicity and nativity status are significantly associated with union formation. Black pregnant teenagers have lower odds of marrying or cohabiting than white teenagers, and Hispanics (native or foreign born) share similar odds of union formation following a teenage conception.

DISCUSSION

Dramatic changes in the American family formation process have occurred in recent decades with increases in cohabitation and serial cohabitation, delays in marriage, and growth in nonmarital fertility. Much of past research has focused on the experiences of young adults without specific consideration for the teenage years. There appears to have been a ripple effect, some of the family changes that have been experienced among older adults also have been experienced among teenagers. At the same time, much of the research on adolescent family formation centers on teenage childbearing without acknowledging cohabitation and marriage. Using life table techniques and an event history framework, we focus on family formation during the teenage years. Overall, 34% of young teens experience some type of family formation activity (cohabitation, marriage, childbearing) during their teen years. Thus, researchers studying family formation need to acknowledge the subset of teenagers who form coresidential relationships and/or have children at young ages.

Cohabitation is the most common family formation activity during adolescence. Over one-quarter (27%) of teenagers cohabit, and most cohabiting teenage women do not have children. Most teenagers who form a union cohabit rather than marry, and among teenagers who marry, cohabitation has become a common pathway into marriage among teenage

brides. Given the median age at marriage is higher than the age at cohabitation (Manning, Brown and Payne forthcoming), teenage marriage may be considered a more 'off-time' event than teenage cohabitation.

Teenage childbearing is a close second in terms of family formation during adolescence. The public discourse on teenage fertility often ignores the relationship context of teenage childbearing and implies that most teenage mothers are living independently. Our results suggest this is an important omission, because cohabitation and marriage are linked to teenage fertility and are associated with an increase in the risk of teenage childbearing. It also appears that in the teenage years, cohabitation is just as often a context for childbearing as marriage. This finding runs counter to prior work on wider age ranges of women, as marriage is more often a context for childbearing in the later adult years than cohabitation (Loomis and Landale, 1994). In addition, consistent with prior work young women from more advantaged families (college graduate mothers) have lower odds of becoming a teenage mother. Only a handful of studies on teenage fertility directly address the living arrangements of young men and women. Further, policy efforts aimed at teenagers need to move beyond an assumption that their target population is living with their parents or alone and acknowledge that some young women and men are living together. Effective programs should work toward incorporating cohabitation into their curriculum. Certainly young men and women need to know that living with a partner places them at greater risk of teenage fertility and work with youth to plan accordingly.

In some states welfare policies used to help support single mothers and their children have specific residence rules targeted at teenage mothers who are under age 18 (Kassabian, Whitesell, and Huber 2012). To receive TANF (Temporary Assistance for Needy Families) young mothers must be living with parents, an adult guardian, or approved living situation. Thus, typically cohabitation among disadvantaged young teenage mothers prevents the receipt of cash assistance. Decisions about cohabitation may vary for young mothers based on their economic circumstances and vary across states to the extent that state-level policies play a role in young mothers' decisions about their living arrangements. More broadly, determination of eligibility and asset rules for other benefits (food assistance, EITC, medical assistance) depends on family definitions that may or may not include cohabiting partners.

When teenagers get pregnant, they more often cohabit than marry before the birth of the child. These findings echo Raley's (2001) and Licther's (2012) results that cohabitation has become an increasingly common response to pregnancy. Overall, it is more common for teenage single mothers to remain single than to cohabit or marry before the birth of their child. The patterns of union formation appear to vary according to indicators of disadvantage with greater union formation among more advantaged mothers. Furthermore, many single mothers eventually cohabit. We find 59% of single mothers cohabit within three years of the conception of their child, and 9% marry. We cannot ascertain whether these are the fathers of their children, but we expect the odds of marriage to the father is reduced as the child gets older (Osborne, Manning & Smock, 2007).

This study extends beyond prior work by focusing on teenage cohabitation but has a few limitations. We do not consider the experiences of earlier cohorts, so we cannot make

assessments about levels of social change. While the NSFG includes excellent marriage, cohabitation, and fertility histories, our work is limited to a narrow set of predictor variables available in the data. Teenage education and employment factors are tied to union formation and fertility; however, the lack of retrospective data on education and employment in the NSFG prevents obtaining adequate indicators that are measured prior to the family event. Further work that considers the implications of teenage cohabitation will help contribute to our understanding of early union formation. The literature suggests some negative implications in terms of economic survival strategies (Almgren et al. 2002) and education (Eshbaugh 2008), but further analyses require broader samples. We recognize that the relationships between cohabitation, marriage, and fertility are complex and interrelated (Musick 2008). We do not account for concerns that fertility and union formation are joint processes, but provide a first step to try to understand how they are linked among teenagers. Our assessments of family formation are focused on just the teenage years. Our work contributes by acknowledging cohabitation may be a family formation activity in adolescence and future research should contrast the family formation trajectories of teenagers and young adults. Finally, our analysis is limited to women's teenage experiences because the male file of the NSFG does not provide parallel cohabitation histories.

Marriage and cohabitation in the teenage years may be starting young women on a 'relationship-go-round' that will have long lasting consequences. Young women from less advantaged backgrounds (measured by mother's education) are more often forming families at young ages which sets the stage for furthering the education divide and diverging destinies of young adults (Ellwood and Jencks 2004; McLanahan 2004). These early family formation patterns will set the groundwork for later family transitions and may have implications for the formation and stability of subsequent cohabitations and marriages. Little is known about the longer-term implications of teenage marriage or cohabitation on future relationship patterns, including serial cohabitation, timing of marriage, and union stability. The trajectories of family life may differ sharply among teenage cohabitors than among their older cohabiting counterparts. To best understand cohabitation and marriage, it may be important to move away from general assessments, and instead consider sources of variation, such as age in family formation experiences.

REFERENCES

Almgren G, Yamashiro G, Ferguson M. Beyond welfare or work: Teen mothers, household subsistence strategies, and child development outcomes. Journal of Sociology and Social Welfare. 2002; 29(3):125–149.

Amato P, Landale N, Havasevich-Brooks T, Booth A, Eggebeen D, Schoen, McHale S. Precursors of young women's family formation pathways. Journal of Marriage and Family. 2008; 70(5):1271–1286. [PubMed: 22719134]

Amato P, Kane. Parents' marital distress, divorce, and remarriage: Links with daughters' early family formation transitions. Journal of Family Issues. 2011; 32(8):1073–1103. [PubMed: 21785523]

Cavanaugh S. Early pubertal timing and union formation behaviors. Social Forces. 2011; 89:1217–1238.

Carroll J, Willoughby B, Badger S, Nelson L, McNamara CB, Madsen S. So close, yet so far away the impact of varying marital horizons on emerging adulthood. Journal of Adolescent Research. 2007; 22(3):219–247.

Chandra A, Martinez G, Mosher W, Abma J, Jones J. Fertility, family planning, and reproductive health of U.S. women: Data from the 2002 National Survey of Family Growth. National Center for Health Statistics. Vital and Health Statistics. 2005; 23(25)

Child Trends. Charting parenthood: A statistical portrait of fathers and mothers in America. 2006. Retrieved from http://fatherhood.hhs.gov/charting02/index.htm.

Child Trends. Births to Unmarried Women. 2013 Retrieved from http://www.childtrends.org/wp-content/uploads/2012/11/75_Births_to_Unmarried_Women.pdf.

Choi K, Seltzer J. Race, ethnic, and nativity differences in the demographic significance of cohabitation in women's lives. CCPR Working Paper Series 2009-04. 2009 http://papers.ccpr.ucla.edu/papers/PWP-CCPR-2009-004/PWP-CCPR-2009-004.pdf.

Cohen J, Manning W. The relationship context of premarital serial cohabitation. Social Science Research. 2010

Ellwood, DT.; Jencks, Christopher. The Uneven Spread of Single-Parent Families: What Do We Know?. In: Neckerman, MK., editor. Social Inequality. New York: Russell Sage Foundation; 2004. p. 3-78.

Eshbaugh EM. Teen mothers: Marriage, cohabitation, and educational achievement. Journal of Family and Social Work. 2008; 11(1):3–16.

Gaughan M. The substitution hypothesis: The impact of premarital liaisons and human capital on marital timing. Journal of Marriage and Family. 2002; 64(2):1741–3737.

Goodwin P, Mosher W, Chandra A. Marriage and cohabitation in the United States: A statistical portrait based on cycle 6 (2002) of the national survey of family growth. National Center for Health Statistics. Vital and Health Statistics. 2010; 23(28)

Graefe DR, Lichter DT. Marriage among unwed mothers: Whites, Blacks and Hispanics compared. Perspectives on Sexual and Reproductive Health. 2002; 34(6):286–293. [PubMed: 12558091]

Houseknecht SK, Lewis SK. Explaining teen childbearing and cohabitation: Community embeddedness and primary ties. Family Relations. 2005; 54(5):607–620.

Kassbian, D.; Whitesell, A.; Huber, E. Washington D.C: The Urban Institute; 2012. Welfare rules databook: State TANF Policies as of July 2011. http://www.acf.hhs.gov/sites/default/files/opre/welfare_rules_databook_2011.pdf

Kennedy S, Bumpass L. Cohabitation and children's living arrangements: New estimates from the United States. Demographic Research. 2008; 19(47):1663–1692. [PubMed: 19119426]

Loomis L, Landale NS. Nonmarital cohabitation and childbearing among Black and White American women. Journal of Marriage and Family. 1994; 56(4):949–962.

McLanahan S. Diverging destinies: How children are faring under the second demographic transition. Demography. 2004; 41(4):607–627. [PubMed: 15622946]

Manlove J, Stewad-Streng N, Peterson K, Scott M, Wildsmith E. Racial and ethnic differences in the transition to a teenage birth in the United States. Perspectives on Sexual and Reproductive Health. 2013; 45(2):89–100. [PubMed: 23750623]

Manning WD. Childbearing in cohabiting unions: Racial and ethnic differences. Family Planning Perspectives. 2001; 23(5):217–223. [PubMed: 11589543]

Manning, WD.; Giordano, PC.; Longmore, MA. Center for Family and Demographic Research, Working Paper 2008-08. Bowling Green, OH: Bowling Green State University; 2008. Adolescent dating relationships: Implications for understanding adult intimate unions.

Manning WD, Landale NS. Racial and ethnic differences in the role of cohabitation in premarital childbearing. Journal of Marriage and the Family. 1996; 58(1):63–77.

Manning WD, Smock PJ. Children's living arrangements in unmarried-mother families. Journal of Family Issues. 1997; 18(5):526–544.

Martin, JA.; Hamilton, BE.; Ventura, SJ.; Osterman, MJK.; Mathews, TJ. National Vital Statistics Reports. Vol. 62. Hyattsville, MD: National Center for Health Statistics; 2013. Births: Final data for 2011. Available at http://www.cdc.gov/nchs/data/nvsr/nvsr62/nvsr62_01.pdf

Martinez, GM.; Daniels, K.; Chandra, A. National Health Statistics Reports. Vol. 51. Hyattsville, MD: National Center for Health Statistics; 2012. Fertility of men and women aged 15–44 years in the United States: National Survey of Family Growth, 2006–2010. Table 12.Available at: http://www.cdc.gov/nchs/data/nhsr/nhsr051.pdf.

Meier A, Allen G. Intimate relationship development during the transition to adulthood: Differences by social class. New Directions for Child and Adolescent Development. 2008; 119:25–39. [PubMed: 18330913]

Mincieli, L.; Manlove, J.; McGarrett, M.; Moore, K.; Ryan, S. The Relationship Context of Births outside of Marriage: The Rise of Cohabitation. Washington, DC: Child Trends; 2007.

Musick K. Planned and unplanned childbearing among unmarried women. Journal of Marriage and Family. 2002; 64(4):915–929.

Musick K. Cohabitation, nonmarital childbearing, and the marriage process. Demographic Research. 2008; 16(9):249–286.

Musick K, Meier A. Are both parents always better than one? Parental conflict and young adult well-being, Social Science Researh. 2010; 39:814–830.

Osborne C, Manning W, Smock P. Married and cohabiting parents' relationship stability: A focus on race and ethnicity. Journal of Marriage and Family. 2007; 69(5):1345–1366.

Pearce L, Thornton A. Religious identity and family ideologies in the transition to adulthood. Journal of Marriage and Family. 2007; 69:1227–1243.

Qian Z. Changes in assortative mating: The impact of age and education, 1970–1990. Demography. 1998; 35(3):279–292. [PubMed: 9749320]

Raley K. Increasing fertility in cohabiting unions: Evidence for the second Demographic transition in the United States. Demography. 2001; 38(1):59–66. [PubMed: 11227845]

Raley RK, Crissey SR, Muller C. Of sex and romance: later adolescent relationships and young adult union formation. Journal of Marriage and Family. 2007; 69(5):1210–1226. [PubMed: 20221420]

Ryan S, Franzetta K, Schelar E, Manlove J. Family structure history: Links to relationship formation behaviors in young adulthood. Journal of Marriage and Family. 2009; 71(4):935–953. [PubMed: 20890404]

Santelli J, Melnika A. Teen fertility in transition: Recent and historic trends in the United States. Annual Review of Public Health. 2013; 31:71–383.

Teachman J. The childhood living arrangements of children and the characteristics of their marriages. Journal of Family Issues. 2004; 25(1):86–111.

U.S. Census Bureau. Table MS-2. Estimated Median Age at First Marriage, by Sex: 1890 to the Present. 2011

Uecker J, Stokes C. Early marriage in the United States. Journal of Marriage and Family. 2008; 70(4): 835–846. [PubMed: 20305796]

Xie Y, Raymo J, Goyette K, Thornton A. Economic potential and entry into marriage and cohabitation. Demography. 2003; 40(2):351–367. [PubMed: 12846136]

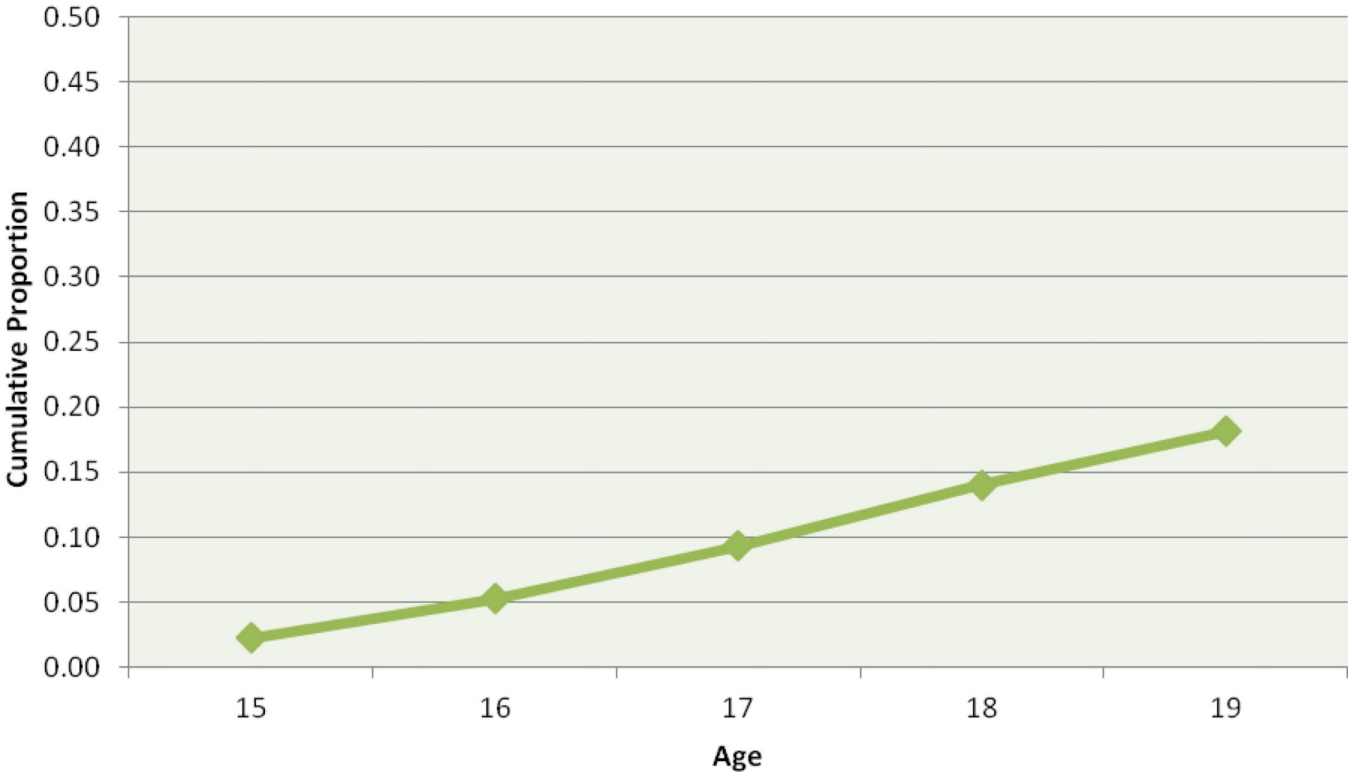

Figure 1.
Teenage Conception (N=3,945)

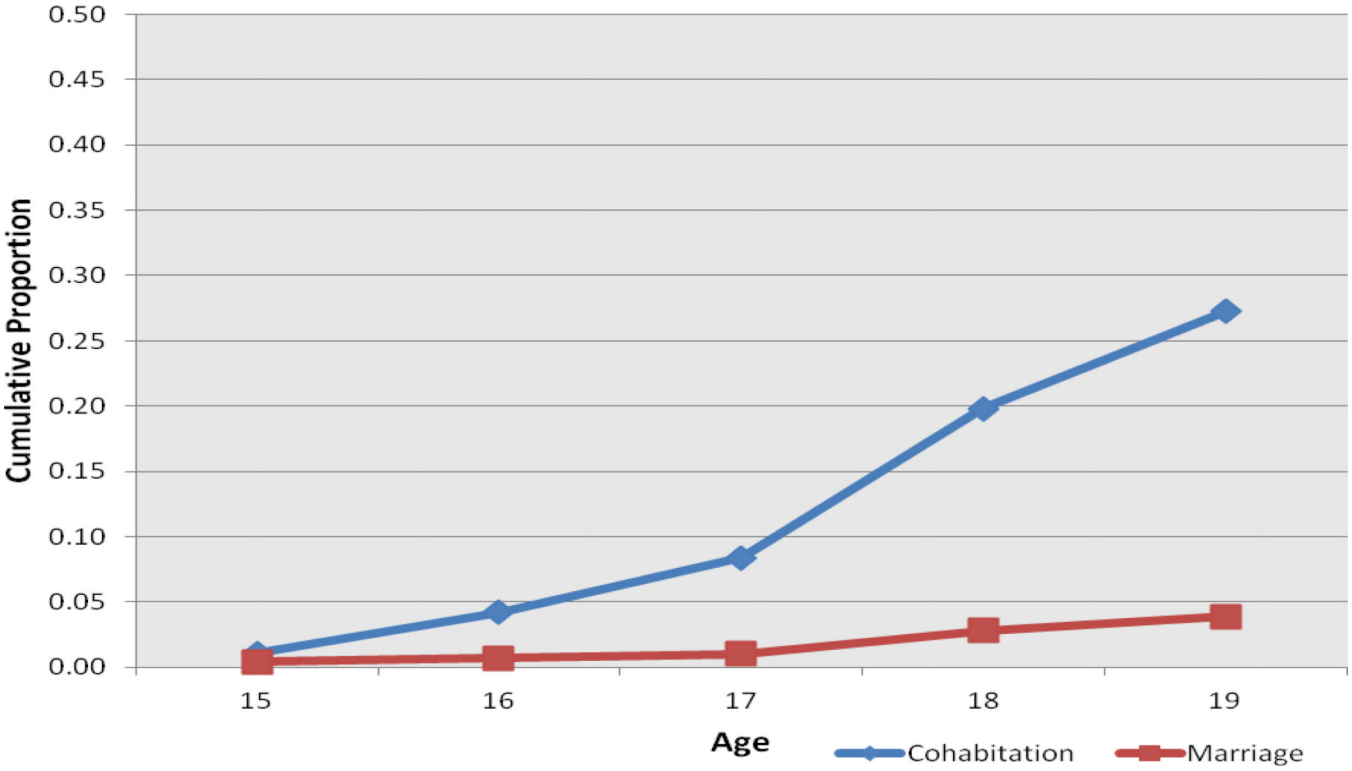

Figure 2.
Teenage Cohabitation and Marriage (N=3,945)

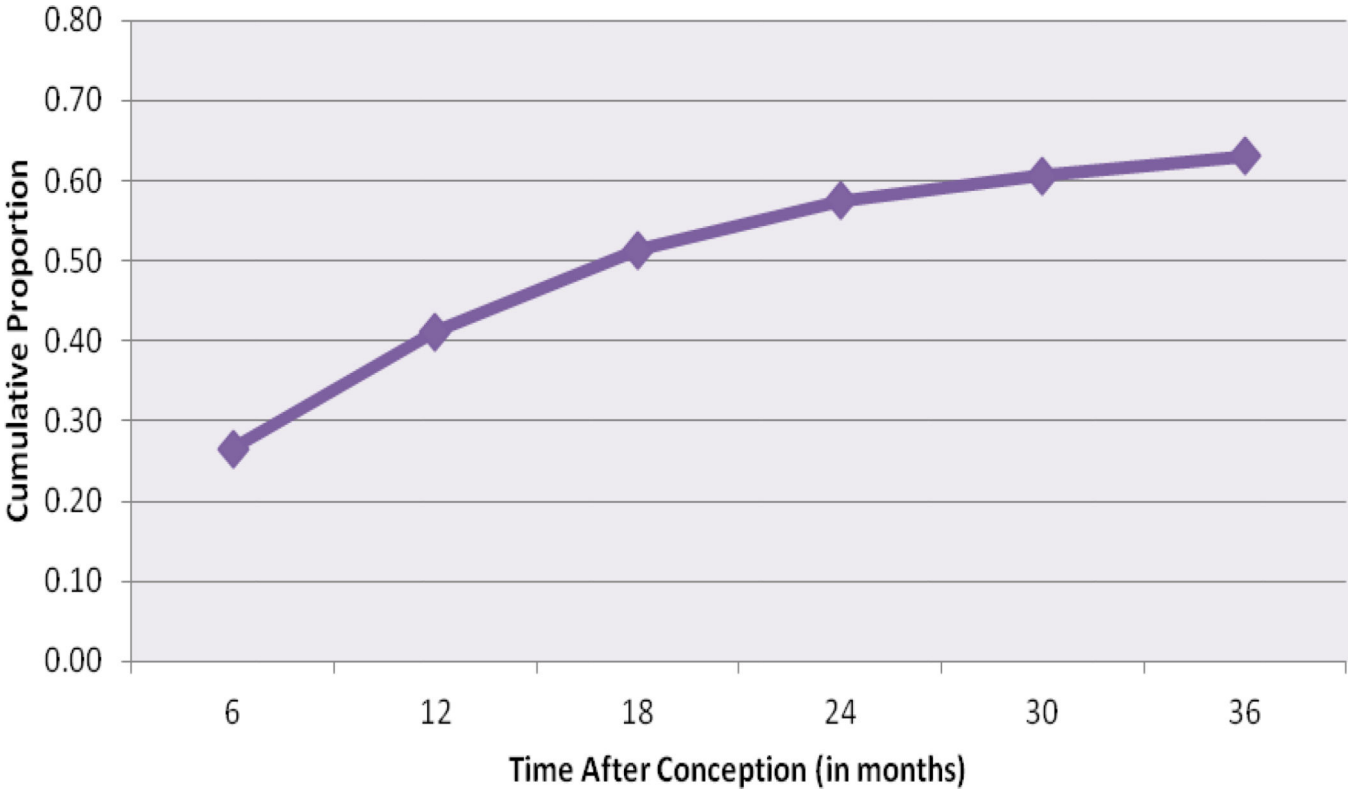

Figure 3.
Union Formation after Teenage Conception (N=477)

Table 1

Distribution of Variables (N=3,945)

Variable	%/mean
Time-Varying Covariates	
Union Status	
Marriage	2.84
Cohabitation	20.87
No union	76.30
Conception Status	
Teen Conception	15.31
No Teen Conception	84.69
Baseline Covariates	
Mother's Education	
< 12 years	15.61
12 years	29.23
13 to 15 years	29.73
16 or more years	25.43
Religious Service Attendance at Age 14	4.68
Childhood Family Structure at Age 14	
Two biological/adoptive parents	55.26
Step Parent	18.89
Single Biological Parent	16.38
Other	9.47
Race/Ethnicity	
White	59.10
Black	14.14
Native-Born Hispanic	12.11
Foreign-Born Hispanic	5.53
Other	9.12

Note: Results are weighted. Source: 2006–2010 National Survey of Family Growth

Table 2

Discrete Time Event History Analysis Predicting Teen Conception (N=3,945)

	Zero Order			Full Model		
	Odds Ratio		**SE**	**Odds Ratio**		**SE**
Teen Union Status (reference = No union)						
Marriage	18.48	***	5.91	18.88	***	5.29
Cohabitation	8.03	***	1.15	6.36	***	0.87
Mother's Education (reference = 12 years)						
< 12 years	2.15	***	0.30	1.76	***	0.25
13 to 15 years	0.71	**	0.09	0.89		0.12
16 or more years	0.25	***	0.06	0.38	***	0.09
Religious Service Attendance at age 14	0.98		0.03	1.00		0.03
Childhood Family Structure at age 14 (reference = Two biological/adoptive parents)						
Step Parent	2.46	***	0.35	1.50	**	0.23
Single Biological Parent	2.40	***	0.37	1.62	**	0.25
Other	2.10	***	0.37	1.32		0.23
Race/Ethnicity (reference = White)						
Black	2.87	***	0.42	2.57	***	0.41
Native-Born Hispanic	2.47	***	0.42	1.93	***	0.34
Foreign-Born Hispanic	3.85	***	0.71	2.29	**	0.46
Other	1.55		0.40	1.33		0.34

p < .05*;

p < .01**;

p < .001***

Note: Results are weighted. Month variable is included and continuous; 174,582 person months. Source: 2006–2010 National Survey of Family Growth

Table 3

Discrete Time Event History Analysis Predicting Teen Union Formation (N=3,945)

	Zero Order						Full Model					
	Marriage			Cohabitation			Marriage			Cohabitation		
	Compared to No Union						Compared to No Union					
	Odds Ratio		SE	Odds Ratio		SE	Odds Ratio		SE	Odds Ratio		SE
Teen Conception Status (reference = Did not conceive a child during teens)												
Conceived child during teens	8.00	***	2.79	5.79	***	0.88	10.86	***	4.00	5.46	***	0.83
Mother's Education (reference = 12 years)												
< 12 years	2.11	*	0.72	1.30		0.18	1.32		0.59	1.19		0.21
13 to 15 years	0.70		0.29	0.64	*	0.08	0.74		0.30	0.76		0.11
16 or more years	1.08		0.46	0.32	***	0.06	1.30		0.52	0.44	***	0.09
Religious Service Attendance at age 14	1.10		0.08	0.88	***	0.02	1.16		0.09	0.92	**	0.02
Childhood Family Structure at age 14 (reference = Two biological/adoptive parents)												
Step Parent	1.01		0.44	3.21	***	0.39	1.19		0.51	2.64	***	0.32
Single Biological Parent	1.34		0.53	2.03	***	0.28	1.30		0.59	1.49	**	0.24
Other	3.01	*	1.24	1.58	**	0.26	3.12	*	1.58	1.27		0.20
Race/Ethnicity (reference = White)												
Black	0.12	**	0.07	0.79		0.11	0.04	***	0.03	0.40	***	0.06
Native-Born Hispanic	1.11		0.44	1.23		0.20	0.76		0.33	0.75		0.13
Foreign-Born Hispanic	3.43	**	1.32	1.18		0.20	1.62		0.80	0.74		0.14
Other	2.19		1.03	1.14		0.25	1.75		0.86	1.03		0.21

p < .05*;

p < .01**;

p < .001***

Note: Results are weighted. Month variable is included and continuous; 174,582 person months. Source: 2006–2010 National Survey of Family Growth

Table 4

Discrete Time Event History Analysis Predicting Union Formation After Teen Conception (N=477)

	Zero Order			Full Model		
	Odds Ratio		**SE**	**Odds Ratio**		**SE**
Age at First Conception	1.17	*	0.08	1.13		0.08
Mother's Education (reference = 12 years)						
< 12 years	0.76		0.19	0.71		0.18
13 to 15 years	1.07		0.22	1.11		0.25
16 or more years	1.24		0.35	1.24		0.34
Religious Service Attendance at age 14	0.94		0.04	0.95		0.05
Childhood Family Structure at age 14 (reference = Two biological/adoptive parents)						
Step Parent	1.04		0.21	0.94		0.23
Single Parent	0.70		0.15	0.70		0.17
Other	0.78		0.18	0.91		0.22
Race/Ethnicity (reference = White)						
Black	0.32	***	0.06	0.37	***	0.09
Native-Born Hispanic	0.84		0.23	1.14		0.31
Foreign-Born Hispanic	0.74		0.33	0.98		0.46
Other	0.59		0.23	0.70		0.24

p < .05*;

p < .01**;

p < .001***

Note: Results are weighted. Month variable is included and continuous;11,522 person months. Source: 2006–2010 National Survey of Family Growth