The Adolescent Family Environment and Cohabitation across the Transition to Adulthood

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Abstract

This study draws upon a sample of men and women from Waves I and IV of Add Health to examine the linkages between the adolescent family environment and cohabitation behavior across the transition to adulthood. Using an event history modeling technique the current paper considers the association between a variety of family factors and both the timing and outcomes of first cohabiting unions. This paper also considers whether the impact of these predictors for cohabitation timing and outcomes varies depending on the age of individuals or the cohabitation duration point. Gender and race differences were examined. Results indicate that exposure during adolescence to family instability, parental cohabitation, lower parental SES, and low family belonging were associated with an elevated likelihood of entering into cohabiting unions, but primarily during adolescence and early adulthood. Family factors, including family belonging and parental relationship history, were also associated with the outcomes of first cohabitations.

Non-marital cohabitation has become an increasingly common part of the American life course. Rates of cohabitation have increased substantially over the past few decades, with the majority of women now having spent at least some time in a cohabiting union (Manning, Brown & Payne, 2014). Cohabitation has also surpassed marriage as the most common context of first coresidential romantic unions (Kennedy & Bumpass, 2008). Given the increasing salience of cohabiting unions for the individual life course as well as broader demographic trends in the American family (e.g. the rise in non-marital childbearing within cohabiting unions; Kennedy & Bumpass, 2008), it is important to advance our understanding of what contributes to when people first cohabit and the stability of these unions.

Various characteristics of the family environment during adolescence may shape the approaches that offspring take towards romantic partnerships. Looking at how more distal family experiences are associated with approaches offspring take towards first coresidential romantic unions will deepen our understanding of the long-arm of family experiences for later behavior. The current study examines several characteristics of the family of origin during adolescence and examines their association with the timing of entrance into and stability of first cohabiting unions, whether and when cohabitations transition to marriage or dissolve. This is the first study that considers whether the impact of these family factors on cohabitation formation and stability is proportional over time. That is, do family factors influence the likelihood of entering into a cohabiting union in the same way during adolescence and through young adulthood? Are these factors associated with the stability of cohabiting unions and the likelihood of making transitions in similar ways across the duration of cohabiting unions? Additionally, the current study examines the cohabiting experiences of both men and women, while much prior research has focused solely on the experiences of young women. Using nationally representative data from waves I and IV of the *National Longitudinal Study of Adolescent Health,* the current study employs a competing-risk discrete time event history framework to examine the timing and stability of first cohabiting unions for men and women.

Background

There are several push and pull factors which might influence whether and when individuals begin cohabiting with a partner for the first time, as well as the trajectory that the relationship takes, whether and when cohabiting partners break-up or transition to marriage. While more contemporaneous factors may shape these relationship decisions, such as socioeconomic status and childbearing (e.g. Kennedy & Bumpass, 2008; Thornton, Axinn & Teachman 1995; Brien, Lillard & Waite, 1999), experiences within the family of origin may also influence both the approaches that youth take towards forming coresidential romantic relationships as well as the stability of these unions.

Adolescence may be an important time to examine the roots of later romantic relationship behavior. Relationships with parents and peers during this period shape individuals' expectations for interactions and help them to develop important relationship skills, such as empathy and reciprocity (Joyner & Camper, 2006). Close and involved relationships with parents during this period are associated with greater social competence in adolescence and young adulthood (Smetana, Campione-Barr & Metzger, 2006) and with more supportive and less hostile relationships with romantic partners in young adulthood (Conger, Cui, Bryant & Elder, 2000; Collins, Welsh, & Furman, 2009). Correlational analyses in the study by Conger et al. (2000) suggest that young adults (mean age 20.7) who are in cohabiting relationships, relative to those in dating relationships, had parents who were less nurturing and involved in their interactions in early adolescence and less warm, less supportive, and more hostile in their marital interactions. The work by Ryan and colleagues (2009) also indicates that individuals who were closer with their parents during adolescence had lower odds of cohabiting before age 20. This suggests that people who cohabit at relatively young ages (20) compared to those who date in non-residential relationships come from more conflictual and less supportive family environments. Thornton, Axinn and Xie (2007) also find that maternal closeness with other relatives is associated with decreased risk of cohabitation among offspring, but only when the cohabiters had no plans for marriage. This finding may indicate that greater cohesion in the broader family unit may act as a barrier to early cohabitation entrance, particularly when such cohabitations are not leading to marriage.

The *Development of Early Adult Romantic Relationships (DEARR)* model by Bryant and Conger (2002) is a useful perspective to consider the possible pathways through which adolescent family experiences may influence later romantic relations in young adulthood. According to this theoretical model, characteristics of the family of origin influence over time the development of romantic relationships in early adulthood through their influence on offspring's 1) social and economic circumstances and 2) individual characteristics (Bryant & Conger, 2002). These characteristics of the family include: the nature of parent-child interactions, stability or change in family structure, and family socioeconomic status. Each of these characteristics/experiences may act to promote or inhibit romantic relationship development through the social and economic advantage or disadvantage that they convey or through their influence on the individual development of offspring. Family experiences, for example having warm and supportive parental interactions compared to hostile and coercive interactions, may promote the development of offspring's interactional styles and competencies. In turn, the interactional styles, problem-solving skills, and emotional health of offspring, shape the approach and attributes of offspring's romantic relationships in early adulthood and finally the outcome or nature of these relationships.

Therefore, the family environment may act as a launching pad for youth that shapes their approaches towards romantic partnerships. However, it is not clear whether the influence of these family factors remains consistent over time, across adolescence and through young adulthood. In the progression across the life course, the salience of various experiences and contexts for development and behaviors may shift (Elder & Shanahan, 2006). While some experiences may guide behavior across the life course in a continuous and cumulative manner, the influence of other experiences are more localized in time and limited in their reach. The transition to adulthood is marked by increased individuation and autonomy, therefore the influence of family relationships and prior experiences for offspring behavior may be reduced across this transition (Smetana, Campione-Barr, & Metzger, 2006). The current study considers

the potential for time-varying effects to better understand what the enduring influence of the family environment for offspring cohabitation across adolescence and into young adulthood.

Several studies have found that individuals from non-intact family backgrounds have an increased likelihood of cohabiting and do so at earlier ages (Ryan, Franzetta, Schelar & Manlove, 2009; Amato & Kane, 2011; Sassler, Cunningham & Lichter, 2009). There's some suggestion that the experience of parental divorce is more influential on the probability of offspring cohabitation than marriage (Thornton, 1991), may increase the risk of either partnership (Kiernan & Hobcraft, 1997), and that individuals with divorced parents have more negative views about marriage (Riggio & Weiser, 2008). There is limited evidence of gender differences in the impact of family structure experiences for early cohabitation, with some suggestion that the effects of parental family structure history on union formation are stronger for women than men (Ryan, et al., 2009). Amato and Kane (2011) find that the influence of family structure on young women's risk of cohabitation is partially mediated by the earlier family environment; having a positive family environment in adolescence was negatively associated with the risk of cohabitation. The current study aims to extend the work done by Amato and Kane (2011) by examining the influence of multiple family experiences, including the quality of family relations as well as parental relationship history, on the union formation behavior of both men and women.

We know little about the role of prior family experiences for cohabitation outcomes. Cohabiting women who grew up in a two-biological parent family structure throughout childhood are more likely to make the transition to marriage (Bramlett & Mosher, 2002) while women who grew up in a single-parent family are more likely to separate compared to women from two-parent families (Manning, 2004). Individuals who were exposed to more family transitions growing up also reported less relationship satisfaction in their cohabiting unions (Sassler et al. 2009), which suggests that exposure to family instability may contribute to instability in cohabiting relationships.

Exposure to different parental relationship experiences may shape the approaches offspring take towards their own romantic unions. Youth who were exposed to family instability and more parental

relationship transitions growing up are more likely to have their transition to adulthood characterized by experiences of cohabitation and parenthood (Fomby & Bosick, 2013). Research also suggests that individuals who have a parent who has lived in a cohabiting union are more likely to cohabit themselves (Smock, Manning & Dorius, 2013; Sassler et al., 2009). This suggests that parental cohabitation experiences may be an important dimension of parental relationship history that may shape the approaches offspring take towards their own romantic unions. However, it is not clear whether parental cohabitation behavior helps to mediate family structure differences. That is, are family structure differences in union formation due in part to higher rates of parental cohabitation among individuals from non-intact family forms? Furthermore, it remains to be seen whether family structure and parental relationship histories influence the union formation behavior of individuals at different ages in similar ways.

There are several underlying mechanisms which may be driving the association between family structure and union formation behavior. The current study explicitly tests for the mediation of family structure effects using the Baron and Kenny (1986) approach. First, family structure transitions have been linked with decreased academic achievement and attainment (e.g. Cavanagh, Schiller & Riegle-Crumb, 2006). Given that youth with less education are more likely to cohabit, perhaps the influence of family structure on cohabitation behavior is mediated by its influence on offspring educational trajectories. Second, higher levels of family conflict and economic stress in non-intact families may motivate youth to "escape from stress" and move into cohabitations with partners at earlier ages. Third, non-intact family structures may also contribute to earlier offspring cohabitation through their association with earlier sexual initiation. Kiernan and Hobcraft (1997) find that much of the association between parental divorce and earlier offspring union formation is mediated by youths' earlier sexual activity. Sexual histories may also influence the stability of cohabiting relationships, with prior research finding that women who had more sexual partners during early adulthood were more likely to engage in serial cohabitation (Cohen & Manning, 2010). Fourth, youth exposure to family structure instability and certain family arrangements, such as parental cohabitation, may influence offspring's attitudes towards marriage and cohabitation,

making them more cautious towards marriage or more open towards cohabitation (e.g. Thornton, 1991). Finally, above and beyond family structure influences, parental marital quality may influence offspring views about marriage and cohabitation, making them more cautious about marriage or perhaps more interested in trying things out within a cohabiting relationship. A study by Amato and Booth (1997) lends support to this idea and finds that parental divorce proneness is linked with higher rates of cohabitation among offspring. However, work by Amato and Kane (2011) does not find evidence for the additional influence of parental marital quality on offspring cohabitation rates beyond family structure.

Research has not explicitly examined the influence of earlier family relationships on the outcome of offspring cohabitations. However, cohabiters have been found to report lower quality parental relationships than married individuals (Nock, 1995). Additionally, researchers using a Dutch sample have found associations between the degrees of commitment adolescents have to both their parents and friends and the level of commitment they have in their romantic relationships in young adulthood (De Goede, Branje, van Duin, VanderValk & Meeus, 2011). Adolescents with more nurturing and supportive relationships with their parents also tend to have higher quality, less conflictual relationships with romantic partners in young adulthood (Collins et al., 2009). Having a greater sense of cohesion or belonging to the family during adolescence has also been linked with greater intimacy in young adults' relationships (Feldman, Gowen & Fisher, 1998). Adolescents whose relations with their parents are characterized by more negative interactions tend to have worse conflict management skills in their later romantic unions (Linder & Collins, 2005). Together, this suggests that having a strong parent-child bond growing up and feeling a sense of belonging to one's family may positively shape the development of relationship skills in ways that promote commitment in romantic relationships.

The current study examines the long-term influence of adolescent relations within the family on the timing and stability of their first cohabiting relationships, whether and how quickly offspring enter into cohabitations and in turn whether and when these relationships lead to marriage or end in separation. Furthermore, the current study explores how exposure to family instability and parental cohabitation may contribute to the timing and stability of offspring's cohabiting relationships, and whether these

dimensions of parental relationship history help to explain family structure differences. By examining how earlier relationship experiences during adolescence influence later relationship formation and stability, this study sheds light on life course processes linking adolescence and young adulthood as well as the enduring influence of earlier relationship behavior and interactions on later romantic relationship development.

Method

Data & Sample

Data analysis was conducted using Waves I and IV of the National Longitudinal Study of Adolescent Health (Add Health), a school-based survey of adolescents in grades 7 through 12 on their health and health-related behavior. This study is nationally representative, utilizing a stratified random sample of students from 134 public, private and parochial schools. The study commenced during the 1994-1995 academic year, with over 90,000 students completing an in-school questionnaire. Of this sample, 20,745 adolescents were also administered at-home questionnaires. A portion of this sample also had a parent, predominantly the mother, fill out a parental questionnaire (n = 17,670). In 2007 and 2008, a fourth wave of data-collection took place with in-home interviews of original respondents, who were then adults between the ages of 24 and 32 (N = 15,701). Additional information on the Add Health sampling frame, response rates and the quality of the data is well documented and available elsewhere (Harris, 2005).

The analytic sample for the current study is restricted to individuals who participated at both Wave I and Wave IV who had a valid sample weight (n = 14,800). Individuals who said they had cohabited or married but were missing important date information to determine timing and type of first union were excluded (n = 662). Individuals whose first residential union was homosexual were also excluded from the analytic sample (n = 258), given that people in same-sex relationships face legal restrictions in access to marriage. Finally, individuals who entered into a union at age 15 or earlier (n = 206) were excluded from the analytic sample, given legal restrictions on the age at marriage (typically age 16 with parental consent). After these exclusions the final analytic sample for the first set of analyses was

13,674 individuals who were single at age 15 and at risk of entering into their first coresidential union. The second set of analyses examining the trajectory of first cohabiting unions was further restricted to the subset of individuals from the first sample whose first union was a cohabitation (n = 8,876). After excluding a small number of individuals who were missing important date information on union duration (n = 54) the sample size for the second set of analyses was 8,822 men and women whose first union was a cohabitation. Multiple imputation procedures were used to handle missing data. Analyses used appropriate weighting and adjustments for stratification and clustering to account for the complex survey design of Add Health, using the svy command in Stata 13.

Analytic Strategy

The first set of analyses explores how adolescent family experiences influence the age when individuals first enter into a coresidential union, while the second set of analyses examines the influences of family factors for the timing of making a transition to marriage or union dissolution within that first cohabiting union. For both analyses a discrete-time competing risk event history modeling approach is used. This approach accounts for the competing risk that the first analytic sample of single individuals face of entering into a cohabitating or marital union and accounts for the competing risk that the second analytic sample of cohabiting individuals face of marrying or breaking up. This method uses duration information on the month and year of event occurrence (union entrance or cohabitation transition) to determine the age at first union formation as well as the timing of cohabitation transitions in order to estimate the hazards of competing events. These models take the form of multinomial logistic regression models that estimate the relative risk of event occurrence at every time point of risk exposure (age in first analysis, person-month in second analysis) up until the person-year of union formation and the person-month of cohabitation transition, or until the respondent is censored by the end of the study period.

To assess the extent to which adolescent experiences mediate the link between family structure and union formation timing, I use the classic mediation assessment of Baron and Kenny (1986). This formulation asserts that a mediating variable must be significantly associated with both the independent and dependent variable, and the inclusion of the mediator must result in a substantial decline in the b

coefficient for the independent variable. I will assume that a 20% reduction in the sub-hazard rate of cohabitation or marriage is substantively significant and indicative of mediation.

Adjustments were also made to control for the prior sorting of individuals into first cohabiting unions when looking at cohabitation transitions. Given that the selection process of entering into a first cohabitation is over multiple alternatives (e.g. marrying directly or remaining single versus entering a cohabiting union), a selection correction which accounts for this multinomial logit specification is preferred (Bourguignon, Fournier & Gurgand, 2007). Models that adjust for potential selection bias were employed using the correction proposed by Dubin and McFadden (1984). This correction essentially uses two inverse Mills ratios, one for the initial probability of cohabiting versus marrying directly and one for the initial probability of cohabiting versus remaining single. These corrections were generated after imputation and included in the final multivariate model.

Measures

Dependent Variables

The dependent variable for the first set of analyses is type of first residential union formed, if any. Information on the respondents' romantic relationship histories collected at Wave IV was used to identify the first union, and type of union. The unit of analysis was the person-year of observation. The 13,674 respondents in the sample contributed a total of 121,035 person years. The dependent variable, first residential union, is categorical and was coded as 0 "single (never married/cohabited)", 1 "marriage", or 2 "cohabitation". Individuals who had not married or cohabited by Wave IV were censored and their age at the Wave IV interview was used as their final person-year observation. Tests of the functional form indicated that the baseline hazard could be categorized into four distinct age groups reflecting adolescence (age 15-18), early adulthood (19-23), the mid-twenties (24-28), and the late-twenties/early-thirties (ages 29-33), to capture the changing hazard of union formation.

In the second set of analyses the age at cohabitation formation, in years, was used as a time-constant independent variable predicting the timing and type of cohabitation transition. This variable was also considered a moderator of the association between earlier experiences and first cohabitation

outcomes. No significant interactions were found between earlier experiences in the family and age at union entrance, suggesting that the impact of family experiences for cohabitation outcomes is similar regardless of the age when offspring first begin cohabiting.

The dependent variable for the second set of analyses is the union-transition, break-up or marriage, of individuals out of their first cohabiting relationship. From romantic relationship histories collected at Wave IV, relationship-specific information on the date of marriage (if applicable) or date of break-up (if applicable) were obtained and ordered to determine the first relevant relationship transition experienced by individuals in their first cohabiting relationship. The unit of analysis for the cohabitation outcome analyses was person-month of observation, with the 8,822 respondents in the analytic sample contributing 228,577 person-months. The dependent variable, cohabitation outcome, is categorical and was coded as 0 "still together (cohabiting)", 1 "married", or 2 "broken up". Individuals who were still cohabiting with their first cohabitation partner at Wave IV were censored and considered "still together". When testing the functional form of the baseline hazard, a measurement schema of duration captured in six-month increments for the first three years (e.g. months 1-6, months 7-12, months 13-18, months 19-24, months 25-30, months 31-36), and then in one year increments for the remaining duration years was identified as the best fitting and most interpretable specification of the changing hazard of cohabitation transitions.

Given that the nature and meaning of making a transition to legal marriage or dissolving a cohabiting union is likely quite different in long-term cohabitations compared to cohabitations of shorter duration, the current analyses focuses on transitions that occurred within the first seven years of a cohabiting union. The small proportion of the sample who did make a transition after year seven (n = 200) are included in the analytic sample, but they are considered as "still together" in a union throughout the risk period. Therefore, period of risk examined is from the month when the respondent first began cohabiting up until they make a transition to marriage or break-up, are interviewed at Wave IV while still cohabiting, or until the first month of year seven (month 84).

Family Factors

Several dimensions of the adolescent family environment will be examined in the current study including: family belonging, parental marital quality, family structure, parental relationship history, and the family socioeconomic environment. These predictors were measured as time-constant variables, with the values from Wave I assigned for each person-year or person-month of observation. Descriptive information on the ranges, means/proportions, and standard deviations for all variables are presented in Table 1. Any means or proportions mentioned refer to the full sample of 13,674, unless the variable is specific to the sample of cohabiters.

… Table 1 here …

Family Belonging. The sense of belonging to their family respondent's felt during adolescence was measured using a scale of four variables which asked adolescent respondents at Wave I how much they felt that (1) their family pays attention to them, (2) people in their family understand them, (3) they want to leave home, and (4) they and their family have fun together (1 = not at all, 5 = very much). The mean level of family belonging and standard deviation from the mean for three groups of respondents by age at Wave I (age 11-14, age 15-16, age 17-21) were used to construct a dichotomous age-adjusted measure. Individuals were divided into those with "low family belonging" (16%; one standard deviation below the age-adjusted mean; "1" reference group), and those with "average-to-high family belonging" (84%; within one-standard deviation of the age-adjusted mean or higher; "0").

Family Structure & Parental Marital Quality. Information about household structure and the quality of parental relations during adolescence was used to assess the influence of both family structure and parental marital relations on offspring coresidential union behavior in young adulthood. Two questions from the Wave I parent interview were used to capture positive and negative dimensions of residential parents' marital relationship: marital happiness and conflict. These questions were: "On a scale of 1 to 10, how would you rate your relationship with your spouse/partner?" (1 = completely unhappy, 10 = completely happy), and "How much do you fight or argue with your spouse/partner?" (1 = a lot, 2 = some, 3 = a little, 4 = not at all). Parents who provided a rating of 7 or less on the happiness question and a 1 or 2 on the conflict item were labeled as "distressed" (Amato & Kane, 2011). Along with information

from the household roster this information was used to construct a categorical variable of family structure with 6 categories: 1) married biological parents, low distress (49%; reference group), 2) married biological parents, high distress (8%) , 3) married step parents, low distress (11%), 4) married step parents, high distress (2%), 5) single parent (22%) , 6) other family form (8%; including cohabiting step parents).

Maternal Relationship History. Information from the Wave I parental questionnaire was used to construct two measures of parental romantic behavior that respondents were exposed to growing up: parental cohabitation and number of mother's prior relationships. A series of questions in the parental questionnaire asking the responding parent about their coresidential relationships in the past 18 years were used to construct these measures. *Parental Cohabitation* is a binary indicator of whether the respondent's biological mother ever cohabited in the past 18 years. Youth whose biological mother reported that at least one of their last three relationships in the past 18 years was a cohabiting relationship were given a one indicating exposure to parental cohabitation (17%). Youth who did not have a parent fill out a questionnaire, or whose questionnaire was filled out by a non-biological parent were given a one for exposure to parental cohabitation if they reported living with cohabiting parents in the Wave I household roster. *Number of mother's prior relationships* is a count variable indicating the number of coresidential relationships that the respondent's biological mother reported having in the past 18 years. Three categories were created for the number of mother's prior relationships: one or fewer (72%), two relationships (19%), and three or more relationships (9%; reference category).

Parental Education. The family socioeconomic environment during adolescence was assessed using a measure of parental education. This variable captures the highest level of maternal educational attainment with information from the Wave I parent questionnaire, or the adolescent questionnaire if missing on the parental questionnaire. Paternal educational attainment was used when the respondent did not have a residential mother. This categorical variable identified respondents whose parent had (1) less than a high school education (16%, reference category), (2) a high school education (38%), (3) some college education (21%) , or (4) a Bachelor's degree or higher (26%).

Adolescent Sexual Behavior was captured by a measure of the number of sexual partners a respondent retrospectively reported having had before age 18 in the Wave IV interview. The count variable was transformed into a three group categorical variable: no sexual partners before age 18 (33%), one or two sexual partners before age 18 (35%), and three or more sexual partners before age 18 (32%; reference category).

Educational Attainment. Information on the educational history of respondents collected at Wave IV (degrees earned and year of degree completion) was used to construct the educational attainment variable as a time-varying construct. For both sets of analyses educational attainment was measured as a series of binary variables indicating educational attainment at each time point (age for analyses one, person-month for analyses two). For every person-year or person-month of risk exposure that the respondent may experience a censoring event (cohabitation or marriage in the first analyses, break-up or marriage in the second) they are given a value for their educational attainment up until that time point: less than a high school degree, high school degree, Associate's degree, or Bachelor's degree and beyond.

Two demographic variables were also used as controls in both sets of analyses, race and gender. *Race* was a time-constant variable measured at Wave I with four categories: non-Hispanic white (68%), non-Hispanic Black (16%; reference group), Hispanic (12%), and non-Hispanic other race (4%; including Asian and Native American). *Gender* was also included in all models as a time-constant variable with male respondents coded as one (50%) and female respondents coded as zero. Additionally, to test for gender and race differences in the association between predictors and union behavior, a series of interaction terms were tested. Interactions that significantly improved model fit and were significant in final multivariate models are discussed in the results.

Results

Among those individuals who were single at age 15 (n = 13,674), the majority had entered into their first co-residential union by Wave IV, when they were on average age 21.5 (Table 1). Cohabitation was the most common first union type, with about 66% of the sample entering into a cohabiting union first. A much smaller proportion of individuals entered into a marriage directly, with about 16% of the

sample entering a marriage as their first coresidential union. Finally, about 18% of the sample remained single into young adulthood having not entered into a coresidential union by Wave IV. Among the sub-sample of first-time cohabiters (n = 8,822), about 50% broke up with their partner (Table 1). A sizeable minority (35%) married their partner, and the remaining 15% were still cohabiting with their first cohabiting partner at the Wave IV interview.

Empirical tests of the proportionality assumption suggested that the association between several predictors and union formation were not proportional across age, including gender, parental education, family belonging, maternal relationship history, and number of sexual partners in adolescence. The time-varying nature of these predictors suggest that the influence of these factors on the hazard of entering into a cohabitation varied across age, often with reduced influence later into young adulthood. Additionally, tests indicated that the association between race and cohabitation outcomes was not proportional across the duration of the first cohabitation. That is, racial differences in the likelihood of first time cohabiters transitioning to marriage or breaking up relative to remaining together varied across the duration of unions.

Multivariate Results

Multivariate analyses help shed light on how family experiences and sociodemographic factors are related to whether, when, and what type of first union individuals enter into between adolescence and young adulthood (Table 2). This table shows multinomial logistic regression models predicting union formation among singles. These models show the log-odds coefficients and odds ratios for all variables on the competing risks of forming a marriage versus remaining single (column 1), forming a cohabitation versus remaining single (column 2), and forming a cohabitation first versus marrying directly (column 3).

… Table 2 about here…

The multivariate analyses presented in Table 3 show multinomial logistic regression models predicting union transitions among first time cohabiters. These results shed light on the associations between family and sociodemographic factors and whether, when, and what type of transition (marriage or break-up) first time cohabiters make across the duration of their union. To assess the extent to which

the outcome of individuals' first cohabiting union was due to the selection of that individual into a cohabiting union, rather than remaining single or marrying directly, models were run with controls for this selection process. The final multivariate model presented in Table 3 includes the Dubin-McFadden selection controls. Results were very similar for models that controlled for selection and those that did not, with a few exceptions. [One dimension of the adolescent family environment was no longer statistically significant after controlling for selection, having a low degree of family belonging. This "mediation by selection" seems to indicate that the higher likelihood of breaking up with their cohabiting partner among individuals with a low sense of belonging to their family during adolescence compared to those who had average or high belonging was largely explained by these individuals' higher likelihood of entering into a cohabiting union to start. Similarly, the higher likelihood of breaking up with their partner among individuals who had three or more sexual partners during adolescence compared to their less sexually active peers was largely explained by their higher propensity to enter into a cohabiting union in the first place.] Models presented in Table 3 show the log-odds coefficients and odds ratios for all variables of the competing risks of transitioning to marriage versus remaining cohabiting (column 1), breaking up versus remaining cohabiting (column 2), and breaking up with the first cohabiting partner versus marrying them (column 3).

… Table 3 about here…

Several demographic factors were related to first union formation as well as the outcomes of first cohabitations. Men were less likely to marry and less likely to cohabit than women during adolescence, but in early adulthood and the mid-twenties this difference declines, with a similar likelihood of marriage and cohabitation among men and women. By the late-twenties/early-thirties men had significantly higher odds of entering a marriage versus remaining single compared to women but a similar likelihood of entering into cohabitations. Finally, men were less likely to cohabit first rather than marry directly compared to women during adolescence. By early adulthood and the mid-twenties this difference converged, with similar likelihoods of entering either union first among men and women. By the late-twenties and early-thirties the initial trend is reversed, with men were more likely to cohabit first rather

than marry directly compared to women. Looking at the cohabitation outcomes of men and women we see that among first-time cohabiters, men had 28% higher odds of breaking up with their partner rather than remaining together and 25% higher odds of breaking up rather than marrying their partner compared to women. Men who broke-up with their partner also did so at significantly earlier durations on average (18.5 months) than women (21.5 months). This gender difference in the stability of cohabiting unions may reflect gender differences in the perceived role that cohabitation plays in people's lives. Men tend to express greater concern over a loss of freedom within cohabitations (Huang, Smock & Manning, 2011), and report less commitment to their partner than women (Pollard & Harris, 2013), which may reflect a greater openness among men to end their unions. Overall this suggests that men are more likely to delay entrance into marriages and cohabitations compared to women, and once they are involved in a cohabiting union they have a higher likelihood of seeing their union dissolve.

Substantial racial differences were also apparent in both analyses of union formation and cohabitation outcomes. Compared to Blacks, all other racial groups had a higher likelihood of marrying directly versus remaining single, while Whites had higher odds of cohabiting compared to Blacks (Table 2). Among all the other racial groups Blacks were the most likely to cohabit first rather than marry directly. Whites had 69% higher odds of marrying their first cohabiting partner compared to Blacks during the first year of their cohabiting union (Table 3). Whites' higher odds of transitioning to marriage increased over the first few years of their cohabitation (159% higher odds in the second year, 172% higher odds in the third year) and remained higher across all possible duration periods. Hispanics were also significantly more likely to marry their cohabiting partner than Blacks. Whites also had 60% higher odds of breaking-up with their partner rather than remaining together compared to Blacks during the first year, but these odds were reduced over the duration of the cohabitation. Overall, results suggest that Whites are both more likely to enter cohabiting unions and more likely to see those cohabiting unions transition to marriage compared to Blacks, but they are also more likely to see their cohabiting unions dissolve, especially early on in the relationship.

Level of parental education was also associated with the first union experiences of offspring. The inclusion of interactions with time indicated that parental education plays a different role for the risk of offspring union formation at different ages of the offspring. Youth whose parent had less than a high school education were significantly more likely to enter a cohabiting union during adolescence compared to individuals whose parent had more education. These differences become smaller in the early adult years, and by the mid-twenties this trend converges; individuals whose parent had more education were no different from those who had less than a high school education in terms of their likelihood of entering a cohabiting union. Finally, differences in the likelihood of entering a cohabitation first or a marriage directly by parental education appear to be quite stable across offspring age. Individuals whose parent had a high school degree or some college education had significantly lower odds of cohabiting first versus marrying directly compared to those individuals whose parent had less than a high school education. In general these results suggest that early cohabitation is more common among individuals from lower socioeconomic backgrounds, but at older ages more and more individuals enter into cohabiting unions, regardless of their socioeconomic background.

Parental education was also linked to the outcomes of offspring's cohabiting unions. Respondents whose parent had a Bachelor's degree or more had significantly higher odds of breaking up with their partner versus staying together with them or marrying them, compared to individuals whose parent had less education (less than high school, high school, or some college).These parental education results control for individual educational attainment. So, these results suggest that coming from a higher socioeconomic background, having a parent with a college education, is associated with a greater likelihood of dissolving one's cohabiting union, possibly after a shorter amount of time. Supplementary exploratory analyses support this conclusion, with significant mean level differences in average duration of cohabitation by parental education level. Individuals whose parent had less than a high school education lived in a cohabitation for the longest amount of time (31.64 months), followed by those whose parents had a high school degree (26.58 months) or some college education (24.95 months), and with individuals whose parent had a Bachelor's degree living in a cohabiting union for the shortest amount of

time on average (21.62 months). Perhaps coming from a higher SES background may enable individuals to get out of cohabiting unions, and more quickly, regardless of one's own educational attainment. Additionally, after accounting for individual educational attainment, there was no longer a statistically significant positive association between parental education and the likelihood of marrying. This suggests that the main reason why individuals whose parent had more education were more likely to marry their cohabiting partner was because they themselves had higher levels of education.

The family structure and parental marital quality experiences of offspring during adolescence were also associated with their risk of entering into a cohabitating union versus remaining single (Column 2, Table 2). Individuals from stepfamilies, single-parent families and other family forms had significantly higher odds of cohabiting versus remaining single compared to youth who grew up in a low-distress, intact family form. Mediation analyses suggest that these family structure differences in cohabitation risk were partially attributable to exposure to family structure instability and sexual behavior in adolescence (analyses not shown); family structure differences are significantly reduced (by 20% or more) when controlling for the respondents' mother's number of romantic partners as well as the number of respondents' sexual partners before age 18. That is, a large part of the reason why individuals from stepfamilies, single parent families, and other family forms had a higher risk of entering a cohabiting union was because they were all more likely to have been exposed to multiple maternal romantic partners and more likely to have had several sexual partners in adolescence rather than no sexual partners. Furthermore, mediation analyses suggest that individuals from stepfamilies, single parent families, and other family forms were more likely to cohabit first rather than marry directly in part because they were more likely to have been exposed to a parent cohabiting themselves.

In this multivariate model there are a few gender differences in the association between family structure and union formation behavior (Table 2). Men from high-distress intact families, but not women, have marginally lower odds of marrying versus remaining single compared to men from low-distress intact families. Women who grew up in other family forms also had significantly higher odds of entering

a cohabiting union compared to women from low-distress intact families, while this difference was significantly smaller among men.

Supplementary analyses suggest that the association between coming from a stepfamily and the outcome of offspring's cohabiting union was largely mediated by exposure to multiple maternal romantic relationships and somewhat by exposure to parental cohabitation (Table 3). That is, individuals from stepfamilies (particularly women in high-distress stepfamilies) were less likely to marry and more likely to break-up with their first cohabiting partner in large part because they were more likely to have been exposed to multiple maternal coresidential unions and parental cohabitation. Individuals who grew up in a single parent family had significantly lower odds of marrying their partner relative to remaining together and were significantly more likely to break-up with their partner rather than marry them, compared to individuals who grew up in a low-distress intact family. In general these results suggest that growing up in a single parent family is associated with a particularly low likelihood of transitioning from a cohabiting union to marriage, compared to the higher likelihood that individuals who grew up in a low-distress intact family had of marrying their partner.

Multivariate results indicate that a number of other dimensions of the adolescent family environment are significantly associated with later union formation behavior (Table 2). Individuals who reported low levels of family belonging in adolescence had 49% lower odds of marrying in their mid-twenties versus remaining single compared to individuals who had average-to-high levels of family belonging. Results also suggest that individuals who reported a low level family belonging in adolescence had significantly higher odds of cohabiting in adolescence, early adulthood, and their mid-twenties rather than remaining single. This difference converges over time, and by the late-twenties and early thirties there was no significant difference in the odds of cohabiting by level of adolescent family belonging. Individuals who had a parent cohabit had significantly lower odds of marrying directly versus remaining single compared to individuals who were not exposed to a parental cohabitation; they were also significantly more likely to cohabit versus remain single or marry directly. Finally, exposure to family instability, in the form of the number of mother's romantic relationships individuals were exposed to, was

significantly associated with cohabitation formation. Individuals whose mother had three or more romantic relationships had higher odds of entering a cohabiting union in adolescence and early adulthood. Over time this trend converged, and by the mid-twenties there was no longer a significant difference in the odds of cohabiting by maternal relationship history.

Several dimensions of the adolescent family environment were also associated with the later stability of offspring's cohabiting unions (Table 3). Compared to individuals who reported average-to-high levels of family belonging, individuals who reported feeling a low level of belonging to their family during adolescence had 18% lower odds of marrying their partner versus remaining cohabiting and 20% higher odds of breaking-up with their partner versus marrying them. After controlling for the initial selection of individuals into cohabiting unions, the higher likelihood of adolescents with low family belonging to break-up with their cohabiting partner is no longer statistically significant. These results suggest that growing up in a family environment in which one doesn't feel like they belong may reduce the likelihood of making the transition to a more formalized union status.

Dimensions of parental relationship history were also associated with the outcome of offspring's first cohabiting union (Table 3). Individuals whose parent cohabited themselves had 28% lower odds of transitioning to marriage rather than remain cohabiting with their partner, compared to individuals whose parent did not cohabit. Additionally, exposure to family instability, in the form of multiple maternal coresidential romantic relationships, was associated with an elevated risk of breaking up with one's cohabiting partner compared to individuals whose mother did not have multiple coresidential relationships while they were growing up.

Sexual behavior in adolescence was also associated with union formation experiences (Table 2). Individuals who had no sexual partners in adolescence had lower odds of marrying or cohabiting versus remaining single in adolescence compared to individuals who had three or more sexual partners during that time; at older ages these differences are reduced and begin to converge. The difference in cohabitation risk was also significantly smaller among men (OR in adolescence = 0.23) than among women (OR in adolescence = 0.19). This finding suggests that the sexual behavior of women during their

formative years may be more strongly tied to their risk of entering into cohabiting unions, particularly at younger ages. Individuals who had one or two sexual partners in adolescence had lower odds of cohabiting versus remaining single during adolescence compared to individuals who had three or more sexual partners in adolescence, but were marginally more likely to marry during adolescence; at older ages this difference converged so that there were no differences in the likelihood of cohabiting. Adolescent sexual behavior, the number of sexual partners individuals had before age 18, was also associated with the likelihood of different outcomes to their first cohabiting unions (Table 3). The fewer sexual partners that individuals had during adolescence, the more likely they were to marry their first cohabiting partner versus remain cohabiting or break-up with them.

An individual's educational attainment is also an important predictor of their first union formation behavior (Table 2). Individuals who never completed high school had significantly lower odds of entering into a marriage directly rather than remaining single compared to people who had more education, and were significantly more likely to cohabit first rather than marry directly. The level of educational attainment an individual had was also linked with the likelihood they experienced different outcomes to their first cohabiting union. Results from Table 3 indicate that the more education individuals had, the more likely they were to marry their cohabiting partner, with individuals who had a Bachelor's degree the most likely to marry. Individuals who had higher levels of education were also significantly less likely to break-up with their partner than marry them. These results suggest that when individuals have more education it's more likely that their first cohabiting union is a step on the way to marriage.

The age when individuals first began cohabiting with their partner was linked with the outcome of their unions (Table 3). The older a person was when they first began cohabiting with their partner, the more likely they were to transition to marriage, with every year after age 16 associated with a 5% increase in the odds of marriage. Among whites, the older individuals were when they began cohabiting, the less likely they were to break-up with their partner, with every year over age 16 associated with a 3% reduction in the odds of breaking-up. Among non-whites, entering into a cohabitation at older ages is associated with a slight increase in the risk of breaking up versus remaining cohabiting. When individuals

begin cohabiting at later ages they are more likely to make the transition to marriage, but only among Whites does a later age at union entrance contribute to more stability for that cohabiting union and a lower likelihood of dissolving the union.

Discussion

The results from this study make three important contributions to our understanding of cohabitation. First, the impact of certain predictors on the risk of entering a cohabitation are not constant across age (family instability, parental education, low family belonging, adolescent sexual behavior). Past research has often looked at predictors in an age-constant way; future research should continue to consider how various "push" and "pull" factors may be more or less important depending on one's age. Secondly, results suggest that exposure to different parental relationships (parental cohabitations and multiple maternal coresidential relationships) has an enduring influence on the approaches that youth take within their own cohabiting relationships. Finally, support and belonging in the earlier family environment continues to have an impact on the later stability of cohabiting unions, regardless of the age when individuals enter these cohabitations. Future research should continue to explore the link between the adolescent family environment and later behavior in romantic unions, and examine some of the possible mediating mechanisms which help to account for the continuing influence of earlier family experiences.

The timing of union formation was associated with the outcome of first cohabiting unions but, importantly, the impact of adolescent family factors for union outcomes did not vary by the age when individuals first began cohabiting. These results suggest that the age when people first begin cohabiting is largely independent of how other factors impact union stability. That is, regardless of the age when people first begin cohabiting, family factors have a similar effect on the outcome of that union. Findings do suggest that the role of cohabitation timing for cohabitation stability varies significantly across racial and ethnic groups. Furthermore, results indicate that racial differences in first cohabitation experiences may lead to a more distinct "White" cohabitation pathway, one that is more likely to lead to marriage, especially over time.

A major goal of the current study was to examine the link between an individual's family environment during adolescence and their experience within their first cohabiting union. A few key findings emerged. Consistent with prior research (Ryan, et al, 2009; Amato & Kane, 2011), results indicate that individuals who were in a stepfamily or single-parent family during adolescence were more likely to cohabit than individuals from married biological parent families. There was limited evidence of differences in union formation behavior by parental marital quality (Amato & Kane, 2011). Much of the association between coming from a non-intact family and the heighten risk of cohabiting was mediated by exposure to high family instability (multiple maternal coresidential romantic unions) and parental cohabitation, especially for individuals from stepfamilies. This finding supports a modeling perspective; youth observe the ways that their parent(s) engage in romantic unions, by living in a cohabiting union or living with several different partners, and this in turn shapes the approaches they take in their own romantic unions.

The influence of family instability on offspring's cohabitation, however, appears to be concentrated on their early risk. That is, being exposed to multiple maternal romantic partnerships elevates individuals' risk of entering into cohabiting unions during adolescence and early adulthood, but this risk weakens as people age. Furthermore, the higher likelihood of cohabiting among individuals who were in more "stressful" family environments during adolescence – higher family instability, lower parental education, and low sense of family belonging – was concentrated in adolescence and early adulthood. These dimensions of family disadvantage (more instability, fewer socioeconomic resources, less emotional support) therefore elevate early risk during adolescence and early adulthood, but over time are less influential on the likelihood of entering cohabiting unions, conceivably as individuals from less disadvantaged backgrounds enter cohabiting unions at more "normative" ages. Additionally, individuals from more disadvantaged family environments may be using the movement into cohabiting unions as a way to escape the stress of these environments at ages when they likely have fewer resources of their own to pull on (e.g. personal income or educational attainment). These findings bring new insight to the

literature on family influences on offspring union formation by highlighting that the influence of family factors on offspring union behavior shifts as individuals age.

An individual's adolescent family environment was linked not just with their likelihood of entering a cohabiting union, but also with the stability and outcome of their union. Results suggest that the degree of support and sense of belonging individuals felt towards their family during adolescence, as well as their parent's relationship history were associated with the outcomes of their later unions. Individuals who were exposed to parental cohabitations were less likely to see their own cohabitation transition to marriage. This highlights the modeling role that parents play for offspring's future romantic behaviors, where cohabitation is perhaps seen as a stable alternative to marriage when one has been exposed to it while growing up. Individuals who reported feeling a low sense of belonging to their family during adolescence were significantly more likely to enter cohabiting unions during adolescence and young adulthood, and they were also significantly less likely to see their cohabiting union result in a marriage and more likely to see it dissolve. These results illuminate the enduring role that emotional support from the family during adolescence can play for later functioning in romantic relationships.

There were few family structure differences in the outcome of first cohabitations. The higher propensity of individuals from stepfamilies, particularly women from high-distress stepfamilies, and individuals from single-parent families to break-up with their partner was largely mediated by their higher likelihood to be exposed to more family instability (multiple maternal romantic relationships). While prior literature has found that individuals from single-parent families are less likely to make the transition to marriage (Manning, 2004), results from the current study add depth to the current understanding of this linkage and point to the role that exposure to family instability plays for the stability of offspring's cohabiting unions. Results also suggest that growing up in a high-distress stepfamily may be particularly impactful on the future relationship stability of women, a finding not previously found in the literature.

While this study provides insight into the timing and stability of first cohabitations, there are some limitations. The measures used to capture family structure and dimensions of the family environment during adolescence are static and capture the experience of respondents at a single point in

time. Given the sometimes fluid nature of family structure and the changing nature of family relations, it would be better to have measures of the family environment at more intervals throughout childhood and adolescence and through the transition to adulthood. Additionally, the economic resources of individuals and their partners are often linked with their likelihood of moving in together and the stability of their unions thereafter (Xie, Raymo, Goyette & Thornton, 2003; Wu & Pollard 2000). However, due to data limitations we do not know about the earnings of individuals in our sample or their partners. Furthermore, we do not have information on the cohabiters' relationship quality, which is likely strongly linked with cohabitation outcomes.

This study presents findings from competing risk discrete time event-history models that help advance our current understanding of the link between the adolescent family environment and the timing and stability of first cohabiting unions. This research fills in several gaps in the literature by examining the cohabitation experiences of both men and women from adolescence further into young adulthood than most prior studies have looked. Additionally, this study carefully considers how the impact of predictors on cohabitation entrance may vary by age at union entrance as well as how the impact of predictors on cohabitation outcomes may vary across the duration of the union. This fills in an important gap in prior literature, which often makes the assumption that predictors have a static impact on the entrance and stability of cohabiting unions. Findings suggest that the impact of predictors do change across age, and to a lesser extent duration of the union, and highlight the need for future research to consider these experiences in a more dynamic fashion. Comparing models which adjust for the initial selection of individuals into first cohabiting unions to those that don't, we find that most results continue hold even after controlling for this initial selection process. Results also highlight that there is significant variation in cohabitation experiences by gender and race. With cohabitation an increasingly common union that many individuals will experience and with more children born into these unions than ever before (Copen, Daniels & Mosher, 2013), it is important to continue to examine how the family environment growing up contributes to the approaches individuals take in cohabiting unions and the stability of this growing family form.

Table 1. Characteristics of the Sample*

Variable	Mean/ Percentage	Std. Error	Range
Characteristics at Wave I			
Gender (1 = male)	50%	0.01	0-1
Age	15.48	0.12	11-21
Race			
White	68%	0.03	0-1
Black	16%	0.02	0-1
Hispanic	12%	0.02	0-1
Other Race	4%	0.01	0-1
Parental Education			
Less than High School	16%	0.01	0-1
High School	38%	0.01	0-1
Some College	21%	0.01	0-1
Bachelor's or more	26%	0.01	0-1
Family Structure/Parental Marital Quality			
Two bio parents, low-distress	49%	0.01	0-1
Two bio parents, high-distress	8%	0.00	0-1
Step-parents, low-distress	11%	0.00	0-1
Step-parents, high-distress	2%	0.00	0-1
Single parent	22%	0.01	0-1
Other Family/Cohabiting Stepfamily	8%	0.01	0-1
Low Family Belonging (1 SD below mean)	16%	0.00	0-1
Parental Cohabitation	17%	0.01	0-1
Number of Mother's Prior Relationships			
One or fewer	72%	0.01	0-1
Two	19%	0.01	0-1
Three or more	9%	0.01	0-1
Characteristics at Wave IV			
Age	28.36	0.12	24-34^
Number of Sexual Partners before age 18			
None	33%	0.01	0-1
One or two	35%	0.01	0-1
Three or more	32%	0.01	0-1
Dependent Variable - Type of First Union			
Single at Wave IV	18%	0.01	0-1
Marriage is first union	16%	0.01	0-1
Cohabitation as first union	66%	0.01	0-1
Characteristics at Union Entrance (among 1st time cohabitors)			
Age at Union Entrance	21.33	0.10	16-32
Educational Attainment			
Less than High School	25%	0.01	0-1
High School	54%	0.01	0-1
Associates/Vocational Degree	7%	0.00	0-1
Bachelor's or more	14%	0.01	0-1
Dependent Variable - Cohabitation Outcome (among 1st time cohabitors)			
Still cohabiting	15%	0.01	0-1
Married	35%	0.01	0-1
Broken up	50%	0.01	0-1

Note: *descriptive statistics refer to the sample of individuals who were single at age 15 (n=13,674) unless otherwise noted as the sample of first-time cohabitors (n=8,822);
^ there are two 34 year olds;

Table 2. Multivariate Models of First Union Formation

	Marriage (Remaining Single is reference)		Cohabitation (Remaining Single is reference)		Cohabitation (Marriage is reference)	
	b	OR	b	OR	b	OR
Gender (male=1)	-1.253 ***	0.29	-0.543 ***	0.58	0.710 **	2.03
Male, Age 19-23	0.805 ***	2.24	0.224 **	1.25	-0.581 **	0.56
Male, Age 24-28	1.194 ***	3.30	0.482 ***	1.62	-0.713 **	0.49
Male, Age 29 plus	1.777 ***	5.91	0.331	1.39	-1.446 **	0.24
Race (black ref)						
White	0.871 ***	2.39	0.405 ***	1.50	-0.466 ***	0.63
Hispanic	0.940 ***	2.56	0.098	1.10	-0.842 ***	0.43
Other Race	0.832 ***	2.30	0.054	1.06	-0.778 **	0.46
Parental Education (less than HS ref)						
High School	-0.217	0.80	-0.436 ***	0.65	-0.219	0.80
Some College	-0.481	0.62	-0.567 ***	0.57	-0.086	0.92
Bachelor's	-1.229 ***	0.29	-1.090 ***	0.34	0.139	1.15
Parental Education by Offspring Age Interactions						
High School X Age 19-23	-0.283	0.75	0.310 **	1.36	0.592 *	1.81
High School X Age 24-28	-0.056	0.95	0.758 ***	2.13	0.814 **	2.26
High School X Age 29 plus	-0.007	0.99	0.650	1.92	0.658	1.93
Some College X Age 19-23	-0.132	0.88	0.340 **	1.40	0.471	1.60
Some College X Age 24-28	0.450	1.57	0.772 ***	2.16	0.321	1.38
Some College X Age 29 plus	0.535	1.71	1.129 **	3.09	0.595	1.81
Bachelor's X Age 19-23	0.345	1.41	0.693 ***	2.00	0.348	1.42
Bachelor's X Age 24-28	1.004 **	2.73	1.321 ***	3.75	0.317	1.37
Bachelor's X Age 29 plus	1.023	2.78	1.136 **	3.11	0.113	1.12
Family Structure (Bio parents, low-distress ref)						
Bio Parents, high distress	0.020	1.02	-0.009	0.99	-0.029	0.97
Step parents, low distress	0.268 *	1.31	0.316 ***	1.37	0.049	1.05
Step parents, high distress	0.324	1.38	0.420 **	1.52	0.096	1.10
Single Parent	-0.036	0.96	0.251 ***	1.29	0.287 *	1.33
Other Family Form	0.130	1.14	0.491 ***	1.63	0.362	1.44
Male X Bio Parents, high distress	-0.443 ^	0.64	-0.005	1.00	0.438	1.55
Male X Step parents, low distress	-0.308	0.73	-0.142	0.87	0.166	1.18
Male X Step parents, high distress	-0.180	0.84	-0.213	0.81	-0.033	0.97
Male X Single Parent	-0.051	0.95	-0.069	0.93	-0.018	0.98
Male X Other Family Form	0.009	1.01	-0.389 **	0.68	-0.397	0.67
Low Family Belonging	0.117	1.12	0.278 ***	1.32	0.162	1.18
Family Belonging by Offspring Age Interactions						
Low Belonging X Age 19-23	-0.311	0.73	-0.067	0.94	0.244	1.28
Low Belonging X Age 24-28	-0.665 *	0.51	-0.197	0.82	0.468	1.60
Low Belonging X Age 29 plus	0.469	1.60	-0.751 *	0.47	-1.220	0.30

Parental Cohabitation	-0.354 *	0.70	0.134 *	1.14	0.488 ***	1.63
Number of Mother's Prior Relationships (one or fewer is ref)						
Two relationships	0.036	1.04	0.047	1.05	0.011	1.01
Three or more relationships	0.109	1.12	0.284 *	1.33	0.175	1.19
Mother's Prior Relationships by Offspring Age Interactions						
Three or more X Age 19-23	-0.026	0.97	-0.136	0.87	-0.110	0.90
Three or more X Age 24-28	-0.055	0.95	-0.447 *	0.64	-0.392	0.68
Three or more X Age 29 plus	-1.698	0.18	-0.487	0.61	1.211	3.36
Number of Sexual Partners before age 18 (three plus ref)						
None	-1.365 ***	0.26	-1.672 ***	0.19	-0.307	0.74
One or two	0.249 ^	1.28	-0.435 ***	0.65	-0.684 ***	0.50
Adolescent Sexual Partners by Age Interactions						
No Sex Partners X Age 19-23	1.108 ***	3.03	0.623 ***	1.86	-0.484	0.62
No Sex Partners X Age 24-28	1.451 ***	4.27	0.866 ***	2.38	-0.585	0.56
No Sex Partners X Age 29 plus	2.222 **	9.23	1.218 **	3.38	-1.004	0.37
1-2 Sex Partners X Age 19-23	-0.305	0.74	0.066	1.07	0.371	1.45
1-2 Sex Partners X Age 24-28	0.006	1.01	0.240 *	1.27	0.235	1.26
1-2 Sex Partners X Age 29 plus	0.357	1.43	1.191 ***	3.29	0.833	2.30
Male X No sex partners	0.005	1.01	0.195 *	1.22	0.190	1.21
Educational Attainment (less than high school ref)						
High School	0.517 ***	1.68	0.170 **	1.19	-0.347 *	0.71
Associates/Vocational Degree	0.515 ***	1.67	0.006	1.01	-0.509 ***	0.60
Bachelor's Degree	0.385 ***	1.47	-0.057	0.94	-0.442 ***	0.64

Note: ^ p < .1* p < .05, ** p < .01, *** p < .001; Model includes control for baseline time (categorical age); F(108,124.2) = 58.71, Prob > F = 0.000

Table 3. Multivariate Models of Cohabitation Stability

	Marriage (Still together is reference)		Break-up (Still together is reference)		Break-up (Marriage is reference)	
	b	OR	b	OR	b	OR
Gender (male = 1)	0.025	1.03	0.250 ***	1.28	0.224 **	1.25
Race (black ref)						
White	0.523 **	1.69	0.468 ***	1.60	-0.056	0.95
Hispanic	0.504 **	1.66	0.005	1.01	-0.500 *	0.61
Other race	0.201	1.22	0.033	1.03	-0.168	0.85
Race by Cohabitation Duration Interactions						
White X second year	0.431 **	1.54	-0.235 *	0.79	-0.665 ***	0.51
White X third year	0.480 **	1.62	0.000	1.00	-0.481 *	0.62
White X fourth year	0.086	1.09	-0.289 *	0.75	-0.375	0.69
White X fifth year plus	0.231	1.26	-0.068	0.93	-0.299	0.74
Parental Education (Less than HS ref)						
High school	-0.043	0.96	0.057	1.06	0.100	1.11
Some college	0.060	1.06	0.087	1.09	0.027	1.03
Bachelor's	-0.086	0.92	0.219 **	1.24	0.306 *	1.36
Family Structure (Bio-Married Parents, low distress ref)						
Bio-Married Parents, high distress	-0.070	0.93	-0.020	0.98	0.050	1.05
Step parents, low-distress	-0.106	0.90	0.077	1.08	0.184	1.20
Step parents, high-distress	0.190	1.21	0.317 ^	1.37	0.127	1.14
Single Parent	-0.228 **	0.80	0.031	1.03	0.259 *	1.30
Other Famly form	0.100	1.11	-0.135	0.87	-0.235	0.79
Male X Step parents, high-distress	-0.422	0.66	-0.573 *	0.56	-0.151	0.86
Low Family Belonging	-0.195 *	0.82	0.093	1.10	0.289 *	1.34
Parental Cohabitation	-0.322 *	0.72	-0.098	0.91	0.225	1.25
Number of Mother's Prior Relationships (Three plus ref)						
One or fewer	-0.013	0.99	-0.238 *	0.79	-0.225	0.80
Two	0.003	1.00	-0.179	0.84	-0.182	0.83
Number of Sexual Partners before 18 (Three plus ref)						
None	0.487 ***	1.63	-0.085	0.92	-0.572 **	0.56
One or Two	0.242 **	1.27	-0.105	0.90	-0.347 **	0.71
Educational Attainment (Less than HS ref)						
High School	0.392 ***	1.48	0.082	1.09	-0.311 *	0.73
Associate's/Vocational	0.764 ***	2.15	0.072	1.07	-0.692 ***	0.50
Bachelor's	1.054 ***	2.87	0.123	1.13	-0.931 ***	0.39
Age at Union Formation (in years)	0.045 *	1.05	0.028 *	1.03	-0.017	0.98
White X Age at Union	-0.016	0.98	-0.062 ***	0.94	-0.046	0.96

Note: model controls for the Dubin-McFadden selection variables; * p < .05, ** p < .01, *** p < .001;
Model includes control for baseline time (duration of cohabitation); F (78,125.3) = 20.31, Prob > F = 0.000

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