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**PARENTAL COHABITATION EXPERIENCES AND ADOLESCENT BEHAVIORAL OUTCOMES**

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## ABSTRACT

Children are increasingly spending time in cohabiting parent families. Most studies that examine the implications of parental cohabitation focus on parental living arrangements at a single point in time. Using data from the National Survey of Family Growth (NSFG), we assess whether and how parental cohabitation during childhood influences adolescent girls' well-being. This work moves beyond prior studies by specifically considering the effects of the exposure to, transitions, and age at which children lived in cohabiting parent families. The results indicate living in cohabiting parent families is consequential for earlier sexual initiation, likelihood of having a teen birth, and high school graduation. Prior work suggests that the explanation for the negative effect of parental cohabitation is family instability. Yet, our empirical work shows that family instability does not explain the relationship between cohabitation and negative child outcomes. We conclude that the best way to understand the implications of parental cohabitation is to adopt a dynamic family experience model.

## **Parental Cohabitation Experience and Adolescent Behavioral Outcomes**

Cohabitation is one of the fastest growing family forms in the United States (U.S. Bureau of the Census 2001). Often policymakers, researchers and the public ignore the fact that cohabiting unions are increasingly including children (Smock 2000). Yet, 12% of children born between 1990 and 1994 were born to cohabiting parents and two-fifths of children are expected to spend some time in a cohabiting parent family (Bumpass & Lu 2000). Despite these trends, research on the implications of cohabitation for children's lives is quite limited (Manning 2002). Most of the research relies on snapshot or single point in time measures of family living arrangements rather than more complete accounts of childhood experiences in various family structures.

This work moves beyond prior work by examining how childhood experiences in cohabiting parent families influence adolescent timing of first sexual experience, teenage birth, and high school graduation. We address two basic questions. First, does being born to cohabiting parent families negatively influence adolescent well-being. Given the relative instability of cohabiting unions, we examine whether family instability explains the effect of parental cohabitation at birth. Second, we assess if later childhood experience in cohabiting families influences adolescent well-being. We employ measures of cumulative family experience to detect whether and how cohabitation influences adolescent lives as well as focus on the time spent and age at which cohabiting parent families are experienced. Unlike prior work, this study distinguishes between family experience in cohabiting two biological parent families and cohabiting stepparent families. We use one of the few national data sources that include such detailed family history data, the National Survey of Family Growth.

## BACKGROUND

### *Cohabitation and Family Trajectories*

Researchers have begun to include cohabitation as a family type in analyses of the effects of family structure on the cognitive, social, behavioral and psychological well-being of children (e.g., Acs&Nelson 2002; Brown 2002; Clark & Nelson 2000; DeLeire & Kalil 2002; Dunifon & Kowalski-Jones 2002; Hanson et al. 1997; Hao & Xie 2001; Manning & Lamb 2001; Raley, Frisco, & Wildsmith 2005; Thomson et al. 1992). Yet many of these analyses rely on the child's most current family structure and do not account for prior childhood family experiences.

Relying on current union status to understand the influence of cohabitation on children's lives may be problematic because cohabiting unions are typically quite short in duration (Graefe & Lichter 1999; Manning, Smock & Majumdar 2002; Raley & Wildsmith, 2004). Relying on age 14 as a measure of children's experience in parental cohabitation misses half of children's experiences in cohabitation (Manning & Bulanda 2006). Hence, prior works utilizing single point in time measures of cohabitation exclude many children who have lived or will live in a cohabiting union at some point in their childhood (e.g., Acs & Nelson 2002; Brown 2004; DeLeire & Kalil 2002; Manning & Lamb 2003). This limitation is just one piece of the mounting evidence suggesting the need to examine complete trajectories of family structure to best understand the effects of family experiences on child and adolescent well-being.

To date, cohabitation has not been adequately incorporated into accounts of family experience trajectories for two primary reasons. First, researchers examining the effects of family structure on child well-being have not been explicit about how cohabitation family experience is treated in these types of analyses (e.g., Hill et al. 2001; Sandefur, McLanahan, & Wojtkiewicz 1992; Wu & Thomson 2001). In turn, experiences in cohabiting parent families are

commonly masked by placing cohabiting parent experiences as single mother or stepparent family experiences. Second, until recently, data limitations have prevented researchers from including cohabiting parent families in analysis of family trajectories.

Use of either longitudinal data or complete retrospective reports has enabled some analyses of parental cohabitation family experience from birth through adolescence (Dunifon & Kowaleski-Jones 2002; Hao & Xie 2001; Morrison 1998, 2000; Raley et al. 2005). However, the findings from these studies are mixed. Hao and Xie (2001) find that time spent in cohabiting parent families is more positively associated with misbehavior than time spent in single mother or stepparent families. Yet, the authors express caution about these findings due to the limited number of cohabiting parent families in both waves of the National Survey of Families and Households. More recent work with the NSFH measures family structure as the following mutually exclusive five categories: always single parent, always two biological parents, divorced family (and not married or cohabiting stepparent), married stepparent (and not cohabiting stepparent), and cohabiting stepfamily. They focus on educational outcomes and find that children raised in cohabiting stepparent families have similar grades as children in married stepparent and stable single parent families and share similar odds of high school graduation as children from stably single parent families. Yet children from cohabiting parent families are less likely to graduate than children from stable biological parent families, divorced parent, and married stepparent families and have lower grades than children from two parent and divorced parent families (Raley et al. 2005). Other studies (Dunifon & Kowaleski-Jones 2002; Morrison 1998, 2000) rely on the National Longitudinal Survey of Youth (NLSY). In the NLSY cohabitation is measured at yearly intervals so it may not capture cohabiting unions of short duration. Dunifon and Kowalski-Jones (2002) use the NLSY to study early adolescents (ages

10-14) and find that the effect of time spent in cohabiting parent families (versus married parent families) depends upon the outcome considered and race of the child. These findings support the argument that it is not just family structure that matters and dynamic measures of family life are necessary to capture the full range of children's experiences.

The question raised in recent studies is whether the mechanism linking family structure and child well-being is family instability rather than simply family structure. Family stability may be particularly important in assessments of the effect of cohabitation because children born to cohabiting parents experience higher levels of instability than children born to married parents (Manning et al. 2002; Raley & Wildsmith 2004). Research indicates that family stability is positively related to child and young adult behavior (e.g., Hao & Xie 2001; Hill et al. 2001; Wu & Martinson 1993). In some cases it appears that family stability (measured by time spent in a family) rather than type of family has a stronger influence on child outcomes. These authors argue that the stress of family change hinders child development (Hao & Xie 2001; Hill et al. 2001; Wu & Martinson 1993). Raley et al. (2005) argue that family instability is one explanation for lower levels of well-being among children in cohabiting parent families. Brown (2006) relies on Add Health to analyze family transitions over the course of one year among adolescents and finds that not all types of family transitions have the same effect on child well-being. For example, parental cohabitation among teenagers in single parent families is tied to higher levels of delinquency and lower levels of school engagement, while transitions from single mother to married stepparent families are not negatively or positively tied to child well-being (Brown 2006). We extend the measurement of instability by accounting for the number of family transitions, children's experiences in multiple family types, and duration of time spent in

cohabiting parent families. Each of these measures represents the instability of families experienced by children.

### *Cohabitation and Biological Ties to Children*

Research on family structure recognizes the importance of biological ties of adults to children and argues that children in two biological parent families fare better than children living with a stepparent (see Coleman et al. 2000). The primary rationale is that most stepfamilies do not offer children the same benefits as two biological parent families (e.g., Fishman 1983; Hofferth & Anderson 2003; Marsiglio 1992). There are varying explanations for lower investments in stepchildren than biological children. Evolutionary biological theories emphasize the necessity of biological ties for parental investments in offspring (e.g., Trivers 1974). An economic view promoted by Becker (2001) argues that men invest more heavily in ‘marital specific capital’ – biological children with their spouse – rather than children from a prior union. Family sociologists argue that the roles and obligations in stepfamilies are not clearly defined (Cherlin 1978), particularly in contrast to married parent families with only biological children. Stepparents may not define their obligations to stepchildren the same as their obligations to biological children. Each of these perspectives offers a slightly different rationale for lower investments in stepchildren rather than biological children.

Thus, we argue to best understand the implications of family structure on children's well-being, detailed measures of family structure that include union status and biological relationships of children and adults are required. Some children in cohabiting parent families are living with two biological parents while others reside with one biological parent and his/her cohabiting partner. Based on the 1996 Survey of Income and Program Participation, nearly half (46%) of



children in cohabiting parent families lived with two biological parents while 54 percent were living with one biological parent (Fields 2001).

Virtually all prior work that includes full cohabitation family trajectories has not made this distinction (Hao & Xie 2001; Dunifon & Kowalski-Jones 2002) or rely only on step-parent families (Morrison 1998; Raley et al. 2005). Thus, we do not know whether the effects of living in cohabiting stepparent and cohabiting two biological parent families are statistically different from one another. Nonetheless, we argue that it may be important to distinguish between children in cohabiting couple families living with two biological parents and those living in cohabiting stepparent families.

#### *Why Cohabitation Matters?*

Even though cohabitation appears to be structurally similar to marriage (two coresident adults) children who spend time in cohabiting parent families may experience more negative outcomes than children who spend time in married parent families without exposure to a cohabiting parent family. Potential explanations for why parental cohabitation may negatively influence child well-being include: instability, family background, selection, and lack of institutionalization.

First, family instability is associated with poor developmental child outcomes due in part to greater emotional stress, inconsistent and poor socialization, and weaker parental control (see Rodgers & Rose 2002). Cohabiting parent families often have higher levels of instability than married parent families. Children born to two biological parent cohabiting parents experience parental dissolutions sooner than children born to married parents (Manning et al. 2002). Yet among children in stepfamilies, those who live with their mother's cohabiting partner share

similar levels of instability as their counterparts who reside in a traditional stepparent family (mother and her spouse) (Bumpass, Raley, & Sweet 1995).

Second, on average, children of cohabiting parent families have parents with lower education levels and lower family earnings than children in married couple families (Manning & Brown 2006). Similarly, Acs and Nelson (2002) report significantly higher levels of financial hardship in terms of poverty and food insecurity among children in cohabiting parent families than children in married couple families. These differences in parental education and family income may be associated with lower well-being of children in cohabiting parent families.

Third, selection processes may be operating such that children's outcomes are not determined by their family experiences, but rather by selection of individuals into different family types. There are several potential ways selection could be operating. Selection may be operating via the children or adolescents' behavior and temperament. For example, mothers with children who have behavior problems may have a harder time attracting a spouse and could be more likely to cohabit than marry. Similarly, selection processes are also based on parents' observed and unobserved characteristics. If individuals who possess characteristics that suggest they are better parents and are more likely to marry than cohabit, then selection may be operating. For example, individuals who have more traditional orientations are less likely to cohabit and may possibly be better able to parent. Thus, cohabitators could be selective of individuals with weaker parenting abilities.

Fourth, cohabiting couple families do not benefit from the social and legal support provided to married couple families (e.g., Durst 1997; Mahoney 2002; Nock 1995; Seff 1995; Smock & Gupta 2002; Wiesensale & Heckert 1993). Thus, the responsibilities of cohabiting

partners (particularly those not biologically related to the child) to children are not specified which may result in poor parenting and negatively influence children's behavior.

### **CURRENT INVESTIGATION**

In this paper we evaluate how children's experience in a cohabiting parent family influences adolescent behavioral outcomes, such as timing of first sexual intercourse, teenage fertility, and high school graduation. Each of these consequential events has significant implications for adolescent well-being and transitions into adulthood. Prior research indicates that family experiences influence each of the outcomes considered (Davis & Friel 2001; Garasky 1995; Moore & Chase-Landale 2001; Sandefur et al. 1992; Wojtkiewicz 1993; Wu & Martinson 1993; Wu & Thomson 2001).

In this paper we address two fundamental questions. First, we determine whether being born to cohabiting parent families negatively influences adolescent well-being. We anticipate that children born to cohabiting parents will fare worse than those born to married parents. Given the higher instability of cohabitation than marriage for children (Manning et al. 2002; Raley & Wildsmith 2004), we assess whether the effect of the hypothesized negative effect of parental cohabitation at birth on adolescent outcomes is explained by family instability and change. We account for number of family changes and expect that children who experience more family changes will have more negative outcomes. We determine whether family transitions have similar effects on children born into each family type. We specifically examine whether stable cohabiting parent families have similar effects on child outcomes as unstable cohabiting parent families. We also include other potentially important factors, socioeconomic status and family background.

Second, we examine whether childhood experience in cohabiting families influences adolescent well-being. We employ measures of cumulative family experience (from birth until age 18 or age of first sex) to detect whether and how cohabitation influences adolescent lives. We expect that children with experience in cohabiting parent families will have lower odds of high school graduation and higher odds of early first intercourse and teenage birth. Yet, the experiences of children in cohabiting parent families may depend upon whether they live with both biological parents or with one biological parent and his/her cohabiting partner. We expect that children in two biological cohabiting parent families will experience more disadvantage than their counterparts who spent time with a biological parent and his/her cohabiting partner.

In addition, we focus on the age, exposure, and instability experienced in cohabiting couple families. The effects of family structure on child outcomes may be strongest when children are young because young children may not be as equipped to deal with family change and possess fewer external resources to support them through family transitions (Chase-Lansdale & Hetherington 1990; Krein & Beller 1988). Also, socialization of young children may have a strong influence on later outcomes, particularly sexual behaviors. For instance, children who are exposed to their parents' nonmarital relationships may be socialized about acceptability of sexual behavior outside of marriage (McLanahan & Booth 1989).

However, family change at older ages may have more consequential effects on teenage behaviors. Family change among adolescents occurs closer to the timing of events (sexual initiation and high school graduation) and may interfere with parental supervision and control. Family change during the teenage years has a greater influence than family change during early childhood on high school graduation (Hill et al. 2001; Wojtkiewicz 1993).

The amount of time spent in specific family types may be related to adolescent well-being. From a child socialization perspective, a greater amount of time spent in single mother families is expected to be related to more negative adolescent outcomes. However, this perspective is not supported in prior work that suggests that time spent in single mother families was not related to early sexual initiation (Wu & Thomson 2001) and teenage birth (Wu & Martinson 1993). Another view offered by a family stability perspective, is that it may be more important for a child to experience relatively few family changes rather than the specific family structure. A stable single mother family may provide consistent home environment and parenting that may be beneficial to children. Some of the empirical literature supports the notion that family change leads to more negative outcomes regardless of the family structure (Hao & Xie 2001; Wojtkiewicz 1993; Wu & Martinson 1993).

Finally, as mentioned above the negative effects of cohabitation may be due to higher rates of instability experienced by children who have lived with cohabiting parents. We examine how the potential negative effect of parental cohabitation on adolescent behavior is influenced by family instability and change.

Our work contributes to prior studies of family structure on adolescent well-being in the following ways. First, cohabiting parent families are included as a family type. Many studies have not included cohabiting parent families as a family structure (e.g., McLanahan & Sandefur 1994; Wojtkiewicz 1993; Wu & Thomson 2001). Second, we distinguish between cohabiting parent families that include two biological parents and those that include only one biological parent and the parent's cohabiting partner. Recent research has focused on this distinction (Brown 2004; DeLeire & Kalil 2001), but most prior research is limited to cohabiting stepparent families or does not separate two biological parent families from one biological cohabiting

parent families. Third, we include dynamic measures of children's cumulative family experiences. Hence, we are able to assess the potential influence of any childhood experience of a cohabiting family, whereas previous research has relied on static, snapshot measures of family type (Acs & Nelson 2002; Brown 2004; Manning & Lamb 2003; Thomson et al. 1994) or narrow time windows (Brown 2006).

## **DATA AND METHODS**

We draw on the 1995 National Survey of Family Growth (NSFG). This survey asks 10,847 women 15-44 about issues related to sexual behavior, fertility, and family formation. For our purpose, these data are ideal because they incorporate complete family histories that include cohabitation as a family type. In addition, these data permit us to distinguish between cohabiting two biological parent families and cohabiting stepparent families. The 1995 NSFG is one of the few national data sources that permit these refined categories of family structure over a child's childhood (the 2002 NSFG only inquires about family structure at age 14). In terms of teenage behavioral outcomes, these data include questions about a range of outcomes including school problems and sexual behavior.

We limit our analyses to respondents who were adolescents (13 to 17 years old) between 1978 and 1994 ( $n=4,225$ ). This sample represents women from the 1965 and 1977 birth cohorts who were between ages 18 and 30 in 1995. This sample restriction is necessary because we want to limit family experiences to recent periods. We exclude respondents without valid data on the dependent measures ( $n = 3$ ) and the family structure measures ( $n = 32$ ). As a result, our analytic sample consists of 4,190 women.

Our key three dependent variables are fundamental factors that relate to young women's adolescent and adult well-being: timing of first sexual experience, birth prior to age 18, and

graduation from high school. The distributions of these variables are presented in Table 1.

Respondents reply to questions about the age at first voluntary sexual activity. We divide the sample into those who had sex prior to age 15, between ages 15 and 17, or no voluntary sexual experience by age 18. Only 12% of the sample has had sexual intercourse before age 15. Nearly half (45%) of the sample has had sexual intercourse between ages 15 and 17, the mean age is 16. Two-fifths (41%) of the respondents had not had sex prior to age 18.

Our analysis of the second outcome, teen birth, is based on respondents who reported having had sexual experience prior to age 18 (N=2,527). We limit our analysis to women who have had sexual intercourse because virgins are not at risk of a teenage birth. The NSFG includes excellent pregnancy and birth histories so we are able to establish whether a respondent had a birth prior to age 18. Among the sexually active teenage women, 13.8% gave birth to a child prior to age 18. This estimate matches national levels.

The third dependent variable is whether the respondent graduated from high school. We code this variable as a dichotomous indicator with a value of 1 indicating graduation and a value of 0 indicating the respondent did not graduate from high school. The vast majority of respondents, 85%, graduated from high school, but 15% did not graduate.

Our core independent variable is family structure. We use the respondent's report of the detailed NSFG family history data to create variables indicating family experiences. These reports require substantial recall of family events over the course of childhood. Respondents may not be able to recall all events that occur early in their childhood. Our findings thus provide a conservative estimate of family experiences. Our measurement of family experience is divided into two parts. First, we include a static measure of family structure at birth using the following categories: single mother, married two biological parents, cohabiting two biological parents, and

other. At birth we code women born to married or cohabiting stepfamilies as 'other' because those family types are relatively rare at birth. We also include number of family transitions as a key variable in the analysis of family structure at birth. The number of transitions provides an indicator of family instability and represents changes in family structure. When cohabiting two biological parent families marry one another or cohabiting stepparents marry one another we do not count these marriages as a transition. In these cases, children remain living with the same parents and the events are simply a change in their legal status.

Second, more complex family trajectory coding schemes are developed that capture childhood family living experiences. We measure these family types at several time points. Our analysis of sexual activity and teen birth relies on measures of family structure that exist until the time of first sexual intercourse, and we use the family experiences through age 17 for those respondents who never had sexual intercourse. Our analysis of high school graduation relies on measures of family experiences through age 17.

Measures of family structure rely primarily on three questionnaire items. The first two items ask the respondent to identify the female and male parental figures residing in the household. Response categories encompass a variety of possible parental figures, ranging from no male/female parents to aunts and uncles. These two items are used to identify the different family structures, while a third item identifying the date of the biological parents' marriage was used to correctly distinguish between married and cohabiting biological parents. These items were used to identify the family structure at the time of the respondents' birth, as well as subsequent family structures experienced if/when the respondent had ever experienced a family transition. The following family structures are included in analyses: married two biological



parent, cohabiting two biological parent, married stepparent, cohabiting stepparent, single mother and other.

The data detail up to 11 transitions and subsequent family structures experienced beyond the time of birth. To facilitate accurate recall of this detailed retrospective data, respondent used a calendar of significant life events for the family history questions. In instances where a respondent could not initially recall a time, respondents were able to use the calendar to place the family experience in the appropriate interval and/or order. Furthermore, follow up questions were asked of respondents who seemed to offer erroneous information to verify the accuracy of the information (nearly 1% of the entire set of respondents). Extraordinary circumstances that appear erroneous (parents who cohabited following a divorce) were confirmed or corrected.

We also include variables that account for timing and duration of family structure experiences. We account for the age at which children experienced particular family types. We include early childhood (ages 0 to 5), middle childhood (6 to 11) and adolescence (12 to 17). We account for the exposure to each family type by including measures of the percent of childhood spent in particular family types. We divide exposure in cohabiting biological parent families into the three categories : less than 54 months (4.5 years or less than 25% of childhood), 54 to 161 months (4.5 to 13.5 years or 25% to 75% of childhood), and more than 161 months (13.5 to 18 years or 75% or more of childhood). We include two dummy variables indicating exposure to cohabiting stepparent families (less than 54 months and more than 54 months). The data will not support more refined distinctions.

We include other variables that are available in our data and have been found to influence timing of first intercourse, teen birth and high school graduation (e.g., Cooksey, Mott & Neubauer 2002; Davis & Friel 2002; McLanahan & Sandefur 1994; Sandefur, McLanahan &

Wojtkiewicz 1992). Using measures of mother's socioeconomic status and characteristics of the child, we include the following control variables in our models: race and ethnicity, birth cohort, religiosity while growing up, mother's education, mother's employment, number of siblings, and whether mother had a teen birth. The distribution of these variables is presented in Table 1.

[TABLE 1 ABOUT HERE]

Race and ethnicity is self-reported and coded as White (68.8%), Black (14.2%), Hispanic (12.5%), and other (4.5%). Birth cohort is a categorical variable representing the year of birth of the respondent. A similar percentage of respondents were born in the cohorts of 1965-69 and 1970-74, with 22.1% born between 1975-77.<sup>3</sup> The respondents were teenagers during the late 1970's and early 1990's. The measurement of religiosity is based on reports of how often the frequency of attending religious services at age 14. The response categories range from 1 to 5 with 1 indicating more than once per week and 5 indicating not at all. The variable was reverse coded so that higher values indicated more frequent attendance of religious services. The average score was 3.3, indicating somewhere between once per week and 1 to 3 times per month. Respondents were asked the highest level of education achieved by their mother. The measure of mother's education is continuous, with an average of 12.3 years. Mother's employment is based on a question that asks about mother's employment most of the time while growing up, ages 5-15. A three category variable is coded as: none (32.8%), part-time (15.6%), and full-time (51.6%). We measured number of siblings based on a question that asked how many children the respondent's mother gave birth to (mean = 2.5). The NSFG does not include any data about the siblings' birth dates or birth order so we cannot determine the ages or residence of siblings while growing up. We measure the timing of mother's fertility employing a question that asked

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<sup>3</sup> We test for interactions of cohabiting parent families and birth cohort. We find that the effects of cohabiting parent families are similar across all birth cohorts considered in this paper.

the age the respondent's mother was at her first birth. We code a dichotomous indicator of whether the mother had a teen birth, with those who had coded as '1' and those who had not coded as '0.' Approximately 15% of the respondents reported that their mother had a teen birth.

Our analyses are based on a series of models for each dependent variable. We apply appropriate analytic techniques (multinomial logistic regression for analyses of first sexual intercourse timing or binomial logistic regression for analyses of teen birth and graduation) depending on the nature of the dependent variable. Multinomial logistic regression is used for analysis of age at first sex because we are interested in differentiating between early sex and 'on-time' sex. Our first set of analyses assesses the effects of family structure at birth. We initially test bivariate models to determine how family structure at birth influences the outcomes. We then add the measure of family instability in the model to evaluate whether the effect of family structure at birth can be explained by family instability. We present the full models including the control variables. We also assess how change in family structure at birth influences adolescent outcomes. We test for interactions to evaluate how family transitions and family structure at birth influence adolescent behavior.

Our second set of analyses focuses on the family structure experiences throughout the respondents' childhood (versus structure only at birth). We present both bivariate and multivariate analyses comparing childhood experiences in a cohabiting family versus experiences in alternate family forms (vs. single mother, married stepfamily, etc.). In these analyses, the analytic samples are restricted to respondents experiencing cohabitation as a child and/or one other contrasting family type. Then, the models are estimated using a dummy variable accounting for the experience of a cohabiting family structures. The resulting coefficients/odds ratios represent the difference in odds of the dependent variable based on

whether respondents experienced cohabitation versus the other family form. We also assess how the age at family experience, duration in a cohabiting family, and the number of transitions are related to adolescent outcomes for respondents who do experience a cohabiting family structure in their childhood.

## RESULTS

Table 2 presents the distribution of our key family structure variables. The first column of the first panel shows that the majority of women were born to married two biological parents (85%). These levels match national estimates for the same birth cohorts. Substantially fewer respondents, 3%, were born into cohabiting two biological parent families and 6% were born to single mothers. Thus, over one third of respondents born to unmarried mothers were born to women who were cohabiting.

[TABLE 2 ABOUT HERE]

In terms of stability and change in family experiences, we present the percentage of respondents born to each family type who experience a family transition. Most children (66.8%) born to married two biological parents experience no family transitions. In contrast half (54.4%) of children born to single mothers and two-fifths (42%) of children born to cohabiting two biological parents experience no family transitions. It is important to note that transitions mean different types of family changes. Transitions among single parent families likely represent formation of two parent families while transitions among cohabiting and married two biological most often represent the loss of a family member.

The second panel reflects children's family experiences up to the age of 18. Most of the respondents have lived in a married two biological parent families. Only 3% spent time living with cohabiting two biological parent families. The next row shows that 16% of respondents

lived in married stepparent families and 4% lived in cohabiting stepparent families. Over one-quarter (29%) spent some time living with unmarried single mothers.<sup>4</sup>

The focus of our analysis is on children's experiences in cohabiting families. The bottom panel presents the distribution of children in cohabiting two biological and cohabiting stepparent families in terms of the number of transitions, age experience each family type, and exposure to each family type. In terms of developmental stage and experience in cohabiting families, we find that children who lived with cohabiting two biological parent families had those experiences at younger ages and half lived in this family for over three-quarters of their childhood. We find that 42% of children who experienced cohabiting two biological parent families lived in stable families and one-quarter experienced two or more family transitions.

In contrast, children who lived with cohabiting stepfamilies typically lived in this type of family at older ages, 71% experienced this family form at age 12 or later. Also, children lived in cohabiting stepparent families for relatively short periods of time. Very few (4%) of the children who lived with cohabiting stepfamilies had a stable family life, and the majority experienced at least two transitions (the median is three transitions). Thus, there are many important differences in children's experiences in cohabiting two biological parent families and cohabiting stepparent families.

#### *Family Structure at Birth and Family Stability*

Table 3 presents the associations of family structure at birth with timing of sexual intercourse, odds of teenage birth, and high school graduation. We present multivariate models but have estimated models that include only the family structure and family transition variables. The first model is a multinomial regression model with the first column indicating the odds of

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<sup>4</sup> These results parallel those unreported for a second analytic sample, which identifies the experiences in these family structures up until the age of first sexual experience (or age 18 for sexually inexperienced).

early sex (< 15 vs. no sex at age 18) and the second column presenting the odds of having sex at ages 15 to 17 (vs. no sex at age 18). We focus on the early sex results here. The first column shows that children born into cohabiting couple families have significantly higher odds of having early sex than children born into married couple families. Children born to cohabiting parents are 128% more likely to have had sex at an early age than children born to married parents. We obtain similar results when we run a zero-order model and when we run a model that includes all the covariates except the number of family transitions from the model (results not shown). Children born to cohabiting couples have similar odds of early sexual activity as children born to single mothers (results not shown). Children who experience more transitions have higher odds of experiencing early sexual intercourse. The inclusion of interaction terms of family structure at birth and number of family transitions does not add to the fit model (results not shown). This finding indicates that the effect of transitions does not vary according to family structure at birth.

[TABLE 3 ABOUT HERE]

In terms of race, Blacks are most likely and Hispanics are least likely to experience early sex. Being born between 1970 and 1974 is associated with increased likelihood of early sex. Higher levels of religiosity were associated with lower likelihood of early sexual experience. The characteristics of the mother were generally significant. Higher levels of maternal education decreased the likelihood of early sex. Girls with mothers who were not employed or employed part-time were less likely than girls with mothers employed full-time to have early sex. The number of siblings is not related to the timing of first sex. Finally, girls with mothers who had children in her teenage years have higher odds of early sexual experience.

In the next models we present estimates of the effects of family structure at birth on the odds of having a teen birth. The sample is limited to girls who were “at-risk” of a teenage birth,

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sexually active.<sup>5</sup> Girls born to cohabiting parents have significantly higher odds of having a teen birth than children born to married parents. We observe similar results when we estimate a zero-order model. Children born to single mothers share similar odds of having a teen birth as children born to cohabiting parents (results not shown). The number of transitions does not have a statistically significant effect on the odds of a teen birth.

However, the interaction term of family transitions and family structure is statistically significant and adds to the fit of the model ( $p < .01$ ). Thus, a model that includes family transitions for each family structure does fit the data better than a simpler model with just family structure at birth. Family transitions among children born to married parents are associated with greater odds of having a teenage birth, but family transitions among children born to cohabiting or single mothers are associated with lower odds of a teenage birth. It appears family transitions among respondents born into family structures other than two married biological parents are associated with a decrease in odds (although still high) of experiencing a teen birth. The relationship between the number of family transitions on odds of having a teen birth vary by family structure at birth.

In addition, Blacks and Hispanics are more likely than Whites to experience a teen birth. The greater odds for Hispanics to have a teen birth are interesting in light of their low odds of having early sex. Neither the birth cohort nor religiosity significantly affect the likelihood of a teen birth. Higher levels of maternal education reduce the odds of a teen birth. In terms of mother's employment, mothers working part-time were less likely than mothers working full-time to have daughters with a teen birth. However, there is no difference between mothers who work full time and mothers who are not employed. More siblings are associated with the greater

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<sup>5</sup> We obtain similar results when our sample is not restricted to sexually active girls.

likelihood of a teen birth. A mother who had a teen birth also had a significant positive impact, reflecting a potential intergenerational effect.

The last columns of Table 3 show the effects of family structure at birth on the odds of graduating from high school. The coefficients in the first column indicate that children born to cohabiting parents experienced lower odds of high school graduation than their counterparts born to married parents. Children who experienced more family transitions had significantly lower odds of high school graduation. Children who were born to cohabiting and single mothers shared statistically similar odds of graduating from high school (results not shown). We observe similar effects when we estimate zero-order models.

A model that includes the interaction of family transitions and family structure at birth improves the fit of the model predicting high school graduation ( $p < .01$ ). Movement out of married two biological parent families is associated with lower odds of high school graduation. Transitions out of single mother families are associated with higher graduation rates. Yet, transitions among children in cohabiting parent families are not associated with lower or higher graduation rates.

In terms of the remaining variables we find that Blacks and Hispanics both exhibit lower odds of graduating high school, compared to Whites. Respondents from more recent cohorts are less likely to complete high school. Higher levels of religiosity and mother's education are associated with greater odds of graduation. However, mother's employment does not significantly impact these odds. More siblings decreases the likelihood of completing high school, as does having a mother who gave birth to a child when she was a teenager.

*Cohabitation Experiences and Adolescent Outcomes*



Panel A of Table 4 presents the bivariate estimates indicating the odds of experiencing early sex, a birth by age 18, and high school graduation according to childhood family types. Each odds ratio represents a comparison between respondents who have experienced a cohabiting family form (biological or step, as indicated at the left of the panel) versus respondents who have experienced an alternate structure (labeled contrast family type across the top of the Table). We include comparisons for each of the dependent variables. The seven comparisons include comparing respondents experiencing biological and step-cohabiting structures with each other, as well as with respondents experiencing married two biological parents, a single mother, and a married stepfamily.

For each comparison in the first three columns, the samples were restricted to respondents who experienced either the cohabiting structure indicated (biological or step) or the contrast family type (married two biological, single mother, married stepfamily). It is possible respondents experienced both family structures being compared. The odds ratios presented represent the difference in odds of experiencing the respective dependent variable for those who experienced the cohabiting structure versus those who did not. Hence, in the first row of the first column, the odds ratios indicate children experiencing a biological cohabiting parent family are more than three times more likely to experience early sex compared to children in married two biological families who do not experience cohabitation. The last column denotes comparisons between respondents who experience a biological versus step-cohabiting family form. This presentation of results, while yielding a plethora of statistical comparisons, has proved useful in making the interpretation of family structure experiences more manageable and interpretable (see Manning & Bulanda, 2006).

The bivariate results in Panel A illustrates how the experience of a cohabiting structure as a child, whether biological or step in nature, is associated with both greater odds of early sex and lower odds of graduation. Children with cohabiting parent experiences have higher odds of having early sex than children who grew up in the other family types (married two biological, single mother, step-married). Yet when comparing the experiences of biological and step-cohabitation with each other, there does not appear to be a significant difference in the odds of early sex. In terms of early motherhood, children who grew up with cohabiting two biological parents had higher odds than their counterparts in other family types. Biological cohabitation does appear different from step-cohabitation in influencing the odds of respondents' having a teen birth (odds ratio = 0.41). The likelihood of graduating from high school is lower among teens raised in cohabiting (biological or step) parent families. Respondents who experience a step-cohabiting parent family structure are less likely to graduate from high school as have respondents who have experienced a biological cohabiting structure.

Panel B of Table 4 presents the same comparisons found in Panel A, but with the additional covariates. In the first column, the results parallel those found in Panel A. In general, children who spent time living with cohabiting parents continue to have higher odds of experiencing early sexual initiation, birth by age 18, and high school dropout than children who grew up with two married biological parents. The differences between children who spent time in cohabiting parent families and single mother and married stepparent families are typically no longer statistically significant with the inclusion of the covariates. One exception is that respondents experiencing a biological cohabiting structure are more likely to have a teen birth compared to those experiencing a married step-family (odds ratio = 1.88). The final column of

Panel B shows there is little difference in the experience of biological versus step-cohabiting structures on the odds of early sex, teen birth, or high school graduation.

#### *Exposure, Age, and Family Transitions*

The effects of living in a cohabiting family structure may depend on exposure or the time spent in each type of family, the age a child experienced a family, or the number of family transitions a child experienced. In our final set of analyses, we assess whether incorporating these measures provides any insight as to how a cohabiting experience may influence the odds of early sex, a teen birth, or graduation.. Our strategy is to create two separate analytic samples: one comprised entirely of respondents who experienced a biological cohabiting structure as a child, and another comprised entirely of respondents who experienced a step-cohabiting structure as a child. For each set of respondents, we hope to better understand how variations in the duration, age of exposure, and the number of family transitions relate to the odds our adolescent outcomes.

However, our understanding of these outcomes is not improved with consideration of age experienced, exposure to, or instability of cohabiting two biological parent families. When we specifically examine children who have lived in cohabiting two biological parent families we find that children who experience cohabitation at young ages have similar experiences as children who experience cohabitation at older ages (results not shown). Similarly, children who live in stable cohabiting parent families fare as well as children who experience unstable cohabiting parent families. Finally, we find marginal evidence that greater duration spent in a biological cohabiting structure is associated with lesser odds of early sex ( $p=.06$ , results not shown).

In a similar manner, our understanding of the outcomes is not substantially improved with consideration of age experienced, exposure to, or instability of step-cohabiting families. Among respondents who ever experienced this structure, neither the age of experience nor the number of transitions experienced were related to the odds of early sex, having a teen birth, or high school graduation. However, girls who spent more time in cohabiting stepfamilies appear to have lower odds of both early sex (prior to age 15 vs. after age 18,  $p = .11$ ) and on time sex (between 15-17 vs. after age 18,  $p = .03$ ) (results not shown). Thus, in terms of sexual initiation it appears that girls are better off living in longer duration cohabiting stepparent families than shorter duration cohabiting stepparent families.

## DISCUSSION

The growth in the number of children who experience cohabiting parent families has been the impetus for research assessing how this particular family type influences the children. However, we argue that there are several aspects of cohabiting families that must be taken into account. For example, in an effort to capture the transient nature of the cohabitation experience, our paper is one of the few to examine how cumulative experiences (any experience from the time of birth through age 18) living with cohabiting parents are related to adolescent well-being. In addition, in some cases we find it is important to distinguish between biological and step-cohabiting structures. By taking these additional factors into consideration, this work offers a more complete understanding of how cohabitation is associated with the well-being of adolescents.

We find that children born to cohabiting parents initiate sex at an earlier age and are more likely to have a teenage birth than children born to married parents. These associations persist despite controlling for the number of transitions, indicating the unstable nature of the union is not

the primary mechanism at work. Similar associations found among single mother and “other” families suggest there may be a common mechanism at play resulting in greater likelihood for earlier sexual debut, relative to married two biological parent families. Parental monitoring has been shown to delay the onset of sexual activity among adolescents (Longmore, Manning, & Giordano 2001). Perhaps cohabiting parents invest less in parenting relationships as well as intimate relationships, resulting in monitoring levels similar to those found in single parents and “other” families.

We observe a similar pattern of results in terms of education. The likelihood of graduating from high school is lower for adolescents born outside of married, two biological parent families. Yet children born to cohabiting parents and single parents share similar odds of high school graduation. These results echo the findings focusing on cohabiting stepparent families reported by Raley et al. (2005). The similarity in the odds of graduation for respondents born to both single mother and biological cohabitators reflects the findings of previous research. Wojtkiewicz (1993) suggests living outside of a married two parent family is more important than the specific family type at the time of birth. Furthermore, the lower likelihood of high school graduation associated with family structure at birth extends beyond family instability. Previous work assessing the influence of parental marital status on high school graduation affirms the importance of assessing parental attitudes toward educational attainment (Raley et al. 2005; Sandefur et al. 1992). Moreover, in the NSFH the gap in high school graduation between children who spent time living with cohabiting stepparents and stable married parents is explained by maternal education expectations (Raley et al. 2005). Thus, future research may be needed to address how parenting attitudes about a wide array of adolescent outcomes differ by family structure.

Our assessment of family structure at birth on adolescent outcomes affirms a need for further research in the area of family instability. Overall, experiencing more family transitions is associated with greater odds of early sex and lower odds of graduating high school, net of family structure at birth. Furthermore, by interacting the number of transitions with the family structure at birth, we see family changes have different implications depending on the family structure at birth. For children born into single mother or biological cohabiting parents, subsequent transitions appear to be associated with decreasing odds of having a teen birth. In contrast, transitions which follow being born into a married biological parent family are associated with an increase in odds of having a teen birth. Hence, these results underscore the importance of accounting for the potential for family transitions to offer a stabilizing influence to children.

This paper also moves beyond prior work by incorporating measures of cohabitation which encompass the respondent's whole childhood, ranging from the time of their birth to the age of 18. The utilization of these dynamic rather than static measures of family structure offer the opportunity to better assess the potential influence of cohabitation on adolescent outcomes (see Manning & Bulanda, 2006). The results of these assessments demonstrate how respondents who experience cohabitation, whether biological or step in nature, are more likely to experience negative adolescent outcomes compared to those who do not experience cohabitation, but who do experience married biological parent families. Specifically, we find that children who have lived with cohabiting two biological parents have earlier sexual onset, greater odds of a teenage birth, and are less likely to graduate from high school than children who lived with married, but not cohabiting, biological parents. These associations persist even after accounting sociodemographic factors, religiosity while growing up, and the timing of parenthood for their mother. Furthermore, children who lived with cohabiting stepparents also experienced more

negative outcomes than children who did not live with cohabiting stepparents, but who did live with married biological parents. However, the odds of having a teenage birth did not differ according to children's experience in cohabiting stepparent families.

We specifically test whether accounting for the biological status of the cohabiting partner is an important step in assessing the influence of cohabitation. Our descriptive findings show that children's experiences in cohabiting stepparent and two biological parent families differ in terms of age, exposure, and instability. Children who lived with cohabiting two biological parents experienced this family type at younger ages, for longer durations, and with fewer family transitions than children who lived with cohabiting stepparents. In terms of adolescent outcomes, spending time living with two biological cohabiting parents appears to be more consequential than living with a cohabiting stepparent family for the odds of becoming a teenage mother. Children who have ever lived with two biological cohabiting parents were more likely to have a teenage birth than children who lived with cohabiting stepparents (and never lived with two biological cohabitators). While this result may appear contrary to expectations, it may be daughters of two biological cohabitators are more inclined to risk having a baby with their partner, modeling the behavior and structure of their own parents. In terms of sexual and education outcomes, children who lived in cohabiting two biological and cohabiting stepparent families share similar odds of early sexual debut and high school graduation. Theoretically, we believe it is important to distinguish cohabiting and stepparent families, but our empirical results support this distinction only for understanding teenage motherhood.

We assess whether the timing, duration, or transitions associated with parental cohabitation relates to adolescent well-being. The best fit for our models is a simple indicator of whether or not a child lived in a cohabiting parent family. The addition of the age lived with and

exposure to cohabiting families does not contribute to the fit of the models. Among children who experience a cohabiting parent family, there is no statistically significant difference in the outcomes according to the age (early childhood, middle childhood, or adolescence) a child lived in a cohabiting parent family. There are some differences in the association between exposure to a cohabiting parent family and child outcomes. There is evidence that longer exposure to a cohabiting stepparent family is associated with lower odds of early sex than shorter exposure. Differences are not observed in the association between exposure in cohabiting stepparent families and high school graduation.

Finally, we evaluate whether the number of family transitions experienced by children of cohabiting parents is associated with well-being. The results suggest that among children who experience parental cohabitation at some point in their childhood, the number of transitions are unrelated to the odds of early sex, having a teen birth, and high school graduation. Models that account for family transitions among children who have lived with cohabiting parents do not fit the data better than models that do not account for transitions. A common argument is that children in cohabiting parent families fare worse because of high instability rates. Yet our results suggest the association of children's experience in cohabiting parent families and child outcomes is not due to the greater instability experienced by children in cohabiting parent families. Instability may be a proxy for other family issues (unemployment, drug or alcohol problems, or weak social networks) that should be measured directly in future work.

Prior research has often combined cohabiting parent family experience and single mother family experience into a single category of unmarried mothers. Girls who were born to single mothers fare as well as girls who lived with cohabiting parents at birth. However, our analysis of cumulative family experiences suggests that girls who have ever lived in cohabiting parent



families fare worse than girls who lived with unmarried mothers. These differences vary somewhat according to biological relationship to the cohabiting partner and the outcome considered. These findings appear to provide some support for differentiating between cohabiting and single mother family experience.

This paper contains several limitations that prevent broad generalizations. First, we consider a narrow array of outcome variables to represent adolescent well-being. Future research may supplement our findings by expanding the scope of outcomes to include factors related to delinquency and psychological well-being. Indeed, family structure does not necessarily have the same influence across all dimensions of well-being. An additional limitation is that our analyses are based on older cohorts, so that it does not necessarily reflect the nature and prevalence of children born into cohabiting families today. This problem affects research in this area. However, we must be mindful that the rate of change in the demographic characteristics of families is not always reflected in the available data. Third, these analyses are limited to the assessment of family change and outcomes for girls. Some evidence suggests that family stability is greater for boys than girls (Katzev et al. 1994; Morgan et al. 1988). Prior work suggests changes in family structure influence boys and girls differently (e.g., Buchanan et al. 1996; Morrison & Cherlin 1995; Powell & Parcel 1997). Further work should pay attention to the possible differential effects for boys and girls. Fourth, we cannot account for the various forms of selection that may be operating. The true effects of family structure cannot be disentangled because of unobserved and omitted variables that are associated with our outcomes and family structure. We use these data to test the influence of cohabitation's instability on child outcomes, and do not allow for tests of alternate explanations, such as the economic well-being, selection factors, and parenting processes of cohabiting parent families. Another limitation is that our

paper focuses on the number of transitions and not the type of family transitions. Further work could investigate how specific family transitions influence adolescent well-being. Finally, we included measures of mother's education and employment to alleviate the limitation of absent income data, but acknowledge it is not a substitute for income. Subsequent research will benefit from utilizing additional data sources with more complete income and parenting histories to assess these factors and their influence on the children of cohabiting families.

Taken together, these results suggest that cohabitation should be included in assessments of the relationship between family structure and child well-being. Our findings indicate that parental cohabitation has an association with the timing of initiation of teenage sexual intercourse, teen births, and high school graduation. Our empirical findings do not overwhelmingly support distinguishing cohabiting two biological parents from cohabiting stepparent families. However, for theoretical reasons we believe distinguishing cohabiting biological and stepparent families should be investigated further. Future work should move away from family instability and focus on the mechanisms that may explain some of the effects of cohabitation on child well-being as well as specific family transitions.

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**TABLE 1. Distribution of Dependent and Control Variables**

Dependent Variables	%	% (Sexually Active)
Age at First Intercourse		
<15	12.3	
15-17	45.9	
18+ or none	41.9	
Teen Birth (<18)		
None	91.9	86.1
Yes	8.1	13.8
High School Graduate		
No	14.8	
Yes	85.2	
Control Variables		
Race/Ethnicity		
White	68.8	70.2
Black	14.2	17.4
Hispanic	12.5	9.9
Other	4.5	2.5
Birth Cohort		
1965-69	40.8	36.5
1970-74	37.1	40.5
1975-77	22.1	23
Religiosity Growing Up	3.3	3.1
Mother's Education Birth	12.3	12.2
Mother's Employment Birth		
None	32.8	27.7
Part-time	15.6	15.2
Full-time	51.6	57.1
Number of Siblings	2.5	2.4
Mother Teenage Birth		
No	85.4	82.1
Yes	14.6	17.9
<i>n</i>	4190	2527

Note: Weighted percentages and unweighted N.

Source: NSFG 1995



**TABLE 2. Distribution of Family Structure Variables**

	Total	Transitions			Total
		0	1	2+	
<b>Family Structure at Birth</b>					
Married Two Biological	85.0	66.8	13.5	19.7	100.0
Cohabiting Two Biological	2.9	42.1	32.9	25.0	100.0
Single Mother	5.7	54.4	22.4	23.2	100.0
Other	6.4	47.9	24.2	27.9	100.0
<b>Childhood Family Experience<sup>a</sup></b>					
Ever Married Two Biological	86.3				
Ever Cohabiting Two Biological	2.9				
Ever Married Stepparent	16.2				
Ever Cohabiting Stepparent	4.1				
Ever Single Mother	28.7				

**Childhood Experience in Cohabiting Parent Families**

		Ever Cohabiting Two Biological	Ever Cohabiting Stepparent <sup>b</sup>
Exposure:	<25%	24.5	50.3
	25-75%	26.0	49.7
	75%	50.0	
Age:	<5	99.0	33.8
	6-11	72.9	55.2
	12+	60.7	71.2
Transitions:	None	42.5	3.7
	One	32.9	9.6
	2+	24.6	86.7

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N 4190

Note: Weighted percentages and unweighted N.

Source: NSFG 1995

<sup>a</sup>These categories are not mutually exclusive. Similar percentages are found when considering family experiences prior to first sexual intercourse.

<sup>b</sup>The exposure to this family structure generally does not occur before the age of 5, precluding a measurement category of greater than 75%. The few cases with this experience are included in the second category.

**TABLE 3: Family Structure at Birth and Odds Ratios of Adolescent Outcomes**

	First Sex		Teen Birth <sup>a</sup>		Graduation	
	Model 1		Model 1	Model 2	Model 1	Model 2
<i>Family Structure at Birth</i>	<15/none	15-17/none				
(Married Two Biological)						
Single Mother	1.85*	1.32	1.88*	2.42*	0.44*	0.28*
Cohabiting Two Biological	2.28*	1.33	2.02*	3.14*	0.48*	0.44*
Other	2.42*	1.51*	1.56*	2.09*	0.56*	0.46*
Number of Transitions	1.18*	1.14*	1.09	1.21*	0.85*	0.78*
<i>Sociodemographic</i>						
Race/Ethnicity						
(White)						
Black	2.13*	1.28*	2.84*	2.84*	0.65*	0.68*
Hispanic	0.57*	0.57*	3.15*	3.16*	0.47*	0.47*
Other	0.38*	0.31*	1.44	1.51	2.41*	2.39*
Birth Cohort						
1965-69	0.52*	0.62*	0.85	0.85	1.38*	1.37*
(1970-74)						
1975-77	1.01	0.81*	0.96	0.95	0.30*	0.30*
Religiosity	0.64*	0.85*	0.93	0.93	1.21*	1.20*
Mother's Education	0.93*	0.97*	0.94*	0.94*	1.13*	1.14*
Mother's Employment						
None	0.60*	0.69*	1.11	1.12	0.86	0.85
Part-time	0.70*	0.85	0.63*	0.63*	1.00	0.98
(Full-time)						
Number of Siblings	0.98	0.98	1.11*	1.11*	0.87*	0.86*
Mother Teenage Birth	1.86*	1.77*	1.54*	1.53*	0.65*	0.64*
Single * Transitions				0.72*		1.80*
Cohab Two Bio * Transitions				0.66*		1.11
Other * Transitions				0.73*		1.20
-2 Log Likelihood	7759.5		2074.3	2062.5	3163.4	3142.1
N	4190		2527		4190	

Source: NSFG 1995

<sup>a</sup>Among sexually active teens

\* p &lt; .05

**TABLE 4: Relationships Between Cohabitation Experiences and Adolescent Outcomes****Panel A - Bivariate**

	<u>Contrast Family Type</u>			
	Married Two Bio	Single Mother	Married Step	Cohabiting Two Bio
<b>Early Sexual Debut</b>				
Cohabiting Two Biological	3.30***	1.57^	1.64*	--
Cohabiting Stepparent	3.80***	1.72*	1.83*	1.14
<b>Birth by 18<sup>a</sup></b>				
Cohabiting Two Biological	3.54***	2.17***	2.91***	--
Cohabiting Stepparent	1.53^	0.91	1.14	0.41**
<b>High School Graduate</b>				
Cohabiting Two Biological	0.29***	0.50***	0.41***	--
Cohabiting Stepparent	0.38***	0.69*	0.55**	1.37

**Panel B - Multivariate**

	<u>Contrast Family Type</u>			
	Married Two Bio	Single Mother	Married Step	Cohabiting Two Bio
<b>Early Sexual Debut</b>				
Cohabiting Two Biological	2.26***	1.46	1.45	--
Cohabiting Stepparent	2.19***	1.50	1.52	0.86
<b>Birth by 18<sup>a</sup></b>				
Cohabiting Two Biological	2.03***	1.47^	1.88*	--
Cohabiting Stepparent	1.42	1.03	1.09	0.73
<b>High School Graduate</b>				
Cohabiting Two Biological	0.47***	0.78	0.76	--
Cohabiting Stepparent	0.46***	0.81	0.70^	0.94

Source: NSFG 1995

<sup>a</sup> Sexually active prior to age 18

Note: Multivariate models include control variables for race, cohort, mother's education, religiosity, mother's employment status, number of siblings, and mother's age at first birth.

^p&lt;.10 \*\*p&lt;.01 \*p&lt;.05 \*\*\*p&lt;.0001

**Appendix A: Percent of Respondents Experience Each Adolescent Outcome According to Family Structure Experiences**

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	Early Age First Sex <sup>a</sup>	Birth by 18 <sup>b</sup>	High School Graduate
Ever Married Two Biological Parent	10.6	11.4	86.9
Ever Single Mother	16.3	17.6	78.1
Ever Married Stepparent	15.0	15.6	80.8
Ever Cohabiting Two Biological Parent	26.1	30.0	66.6
Ever Cohabiting Stepparent	20.1	14.8	69.3

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Source: NSFG 1995

Note: Weighted percentages

<sup>a</sup>Percent experiencing sex by the age of 15

<sup>b</sup>Only sexually active respondents