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Cohabitation and Measurement of Family Trajectories

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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, two-fifths of children are expected to spend some time in a cohabiting parent family (Bumpass and 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 childhood experiences.

We move beyond prior work by first examining the potential benefits of employing measures of cumulative family experiences rather than measuring family structure at a single point in time (typically age 14). This approach recognizes the fluid nature of families, in particular cohabiting parent families. Second, we briefly review how childhood experiences in cohabiting parent families influences adolescent well-being. We focus on one specific school based behavior, suspension from school. We use one of the few national data sources that includes 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 and Nelson 2002; Brown 2002; Clark and Nelson 2000; DeLeire and Kalil 2002; Dunifon and Kowalski-Jones 2002; Hanson et al. 1997; Hao and Xie 2001; Manning and Lamb

2003; Thomson et al. 1992). Yet many of these analyses rely on *current* family structure. This may be problematic, because from a child's perspective cohabiting unions are typically quite short in duration (Manning, Smock and Majumdar 2003). One way to illustrate this point is that 6% of children were living in cohabiting parent families in 1999 (Acs and Nelson 2001), but two-fifths of children are expected to spend some time in a cohabiting parent family (Bumpass and Lu 2000). Furthermore, whether two biological parents are present in cohabiting parent families differs depending on the age of the child. Overall, about half of children in cohabiting parent families are living with two biological parents and the other half live with one biological parent and their cohabiting partner (Fields 2001). Most very young children living with cohabiting parents are living with two biological cohabiting parents, and most teenagers living with cohabiting parents are living with one biological parent and their parent's cohabiting partner (Brown 2002). The consequences of relying on current union status are that analyses are potentially based on children in stable cohabiting unions, the experiences of many children who have spent time in cohabiting parent families are excluded, and the biological relationship of cohabiting partners to the child depends on the age of the child.

More recently researchers have tackled the important task of describing cumulative childhood experiences in cohabiting parent families (Bumpass and Lu 2000; Graefe and Licther 1999). These papers have demonstrated that cohabitation has become an important part of the childhood of Americans and exhibit the fluidity of cohabiting parent families. Indeed, the most common transition for children born to cohabiting parents was to a stable married parent family (Graefe and Licther 1999). This work provides a launching point for this study.

Mounting evidence suggests we need to examine trajectories of family structure to best understand the effects of family experiences on child and adolescent well-being (e.g., Bumpass

and Lu 2000; Carlson and Corcoran 2001; Cooksey 1997; Graefe and Licther 1999; Hill, Yeung and Duncan 2001; Wu and Martinson 1993; Wu and Thomson 2001). Strategies to account for children's family experiences often are based on relatively complex measures of the proportion of life and duration of time spent in specific family types, as well as number and timing of family transitions.

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). 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). We measure instability in terms number of family transitions, any experience in different family types, and duration of time spent in cohabiting parent families.

To date, cohabitation has not been adequately incorporated into accounts of family experience trajectories. Experiences in cohabiting parent families are commonly masked by placing cohabiting parent experience as single mother or stepparent family experience. 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 and Wojtkiewicz 1992; Wu and Thomson 2001). Until recently, data limitations have prevented researchers from including cohabiting parent families in analysis of family trajectories.

Only a few researchers have applied *cumulative* measures of experience in cohabiting parent families to examine child well-being (DeLeire and Kalil 2002; Dunifon and Kowalski-Jones 2002; Hao and Xie 2001; Morrison 1998, 2000; Morrison and Ritualo 2000). Use of either longitudinal data or complete retrospective reports has enabled some analyses of parental cohabitation family experience from birth through adolescence (Dunifon and Kowalski-Jones 2002; Hao and Xie 2001; Morrison 1998, 2000). Hao and Xie (2001) find that time spent in cohabiting parent families is positively associated with misbehavior, but they express caution about these findings because of the limited number of cohabiting parent families in both waves of the National Survey of Families and Households. Other studies (Dunifon and Kowalski-Jones 2002; Morrison 1998, 2000) rely on the National Longitudinal Survey of Youth (NLSY). Dunifon and Kowalski-Jones (2002) 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. Morrison (1998; 2000) focuses on children who have experienced their parent's marital disruption and finds that stability rather than legal status of the union determines child well-being. The yearly measures of family structure in the NLSY may be underreporting some family transitions and some of these authors do not distinguish between cohabiting two biological and cohabiting stepparent families.

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). Virtually all prior work that includes full cohabitation family trajectories has not made this distinction (Hao and Xie 2001; Dunifon and Kowalski-Jones 2002) or rely only on step-parent families (Morrison 1998). Half of children in cohabiting parent families are living with two biological parents while the other half reside with

one biological parent and his/her cohabiting partner (Fields 2001). DeLeire and Kalil (2002) distinguish between the experience in cohabiting two biological and cohabiting stepparent families by using the National Educational Longitudinal Survey to examine late adolescent well-being. Unfortunately, data limitations prevent them from accounting for experience in parental cohabitation prior to 8th grade resulting in an abbreviated family history (DeLeire and Kalil 2002). They find different direction of effects based on the biological relationship to cohabiting parents for some outcomes but they do not establish whether the effects of living in cohabiting stepparent and cohabiting two biological parent families are statistically different from one another.

CURRENT INVESTIGATION

Our primary aim is to examine in detail the family experiences of children with parental cohabitation. We focus on children's experience through age 14 in an attempt to evaluate how relying on static rather than dynamic measures influences our understanding of children's experience in parental cohabitation. We rely on family history questions for young women from birth to age 14. Our work focuses on young women who turned age 14 between the late 1980s and early 1990s, essentially the 1970-1981 birth cohort.

To illustrate the effects of these family trajectories we evaluate how prior and current experience in a cohabiting parent family influences an adolescent school outcomes, suspension or expulsion from school. This may be a gateway to later problem behaviors. Prior research indicates that family experiences influence school based outcomes (e.g., Garasky, 1995; Hill et al. 2001; Manning and Lamb, 2003; Sandefur et al., 1992; Wojtkiewicz 1993).

First, we determine whether being born to cohabiting parent families is negatively associated with being suspended or expelled from school. 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, Smock and Majumdar 2002), 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.

Second, we assess how living in a cohabiting parent family at age 14 influences child behavior. We examine differences in the effects of living in a cohabiting two biological or cohabiting stepfamily at age 14.

Third, we examine whether 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. We expect that children with experience in cohabiting parent families will have higher odds of suspension and expulsion from school. Yet, we expect that children in cohabiting parent families will experience more disadvantage when they live with only one biological parent.

In addition, we focus on the age and time spent in cohabiting couple families. The effects of family structure on child outcomes may vary depending on age when the child experienced different family types. We expect family change at older ages may have more consequential effects on teenage behaviors and perhaps 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). Similarly, the amount of time spent in specific family types may be related to adolescent well-being. Drawing on a family stability perspective, it may be more important for a child to experience relatively few family changes rather than the specific family structure. Stable families may provide consistent home environment and parenting that may be beneficial to children. The empirical

literature supports the notion that family change leads to more negative outcomes regardless of the family structure (Hao and Xie 2001; Wojtkiewicz 1993; Wu and Martinson 1993).

Our work contributes to prior studies of family structure on adolescent well-being in the following three 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 and Sandefur 1994; Wojtkiewicz 1993; Wu and 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. Only a few new papers have focused on this distinction (e.g., Brown 2002; DeLeire and Kalil 2001; Hofferth and Anderson 2003), but to date there has been little attention to the family history from birth through adolescence. Third, we include dynamic measures of children's experiences. Previous research has relied on snapshot measures of family type (Acs and Nelson 2001; Brown 2001; Manning and Lamb 2003; Thomson et al. 1994).

DATA AND METHODS

We draw on the 1995 National Survey of Family Growth. This survey asks women 15-44 primarily 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. No other national data permit these refined categories of family structure. These data allow us to move beyond current family structure measures and the relatively crude measure of family structure at age 14. In terms of teenage behavioral outcomes, these data include questions about school problems.

We limit our analyses to respondents who were between ages 14 and 25 in 1995, limiting the analytic sample to women who were age 14 between 1981 and 1995. This sample represents women from the 1970 and 1981 birth cohorts. This sample restriction is necessary because we are interested in avoiding recall error and want to limit family experiences to recent periods. As a result, our analytic sample consists of 2,897 women.

For illustrative purposes we focus on one key dependent variable that indicates young womens' adolescent school problem behavior, suspension or expulsion from school. In our sample 15.8% were expelled or suspended from school.

Our core independent variable is family structure. We use the detailed NSFG family history data to create variables indicating family experiences. Our core independent variable is family structure. We use the detailed NSFG family history data to create variables indicating family experiences. There are three questionnaire items employed to identify the family structure at the time of the respondents' birth. The first step was to use two items identifying the male and female parental figure at the time the respondent was born. The response categories covered a broad spectrum of possible parental figures, including: no female parent, natural mother, step mother, adoptive mother, father's girlfriend, foster mother, grandmother, aunt, other female non-relative, other female relative, or guardian. Parallel responses were available to identify the male parental figure.

These two items served to identify several different types of family structures, but did not allow for positive distinction between married biological parents and cohabiting biological parents. Several other items helped to identify these structures. The respondents of the NSFG identified whether their biological parents ever married, and if so, when they married. The date

of marriage was then matched with the time of the respondents' birthdates and the presence of both biological parents in the household to identify the correct family form.

Beyond the family structure at birth, the NSFG collects information that may be used to detail up to 11 more possible family forms *and* transitions experienced by the respondents. The primary item used to identify a change in the respondents' living situation is a question (repeated up to 11 times) asking respondents if their prior parental living situation ever changed, and how it changed.[1] Since our purpose in this project is to simply identify if a change occurred, any valid response to this item is coded as a family transition. The exception is the marriage of cohabiting partners, this is not treated as a transition. For respondents experiencing a change, the identity of both the male and female parental figures in the subsequent family form is obtained. This information is used in the same manner as discussed for family structure at birth. In turn, our coding identifies if a respondent has ever experienced specific family structures

In addition to identifying family changes, the NSFG includes information on the beginning and end dates of each family structure experienced. This information offers the opportunity to compute the duration of time experienced in each family structure. In addition, these details, when used with the respondents' birth date, interview date, and current age, may be used to specify: the age of the respondent in each family structure, if they experienced a structure before any age of interest, and/or duration of experience in a family form until any age of interest.

Our measurement of family experience is divided into two parts. First, we include static measures of family structure. We begin by coding family structure at birth using the following categories: single mother, married two biological parents, cohabiting two biological parents, and

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[1] The data includes a broad range of responses to identify the nature of a family change, including separation, divorce, death, family problems, reconciled separation, remarriage, or going to live with another parent.

other. At birth we code women born to married or cohabiting stepfamilies as 'other' because those family types are relatively rare at birth. Another indicator is the number of family transitions as a key variable in analysis of family structure at birth. The number of transitions provides an indicator of family instability and represents changes in family structure. As mentioned above, 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 this case, children remain living with the same parents and the event is simply a change in their legal status. A third measure that is still commonly used in studies is family structure at age 14. The six family types include: single mother, married two biological, married stepparent, cohabiting two biological, cohabiting stepparent, and other.

Second, we use more complex family trajectory coding schemes that capture childhood family living experiences. We measure these family types at several time points and establish whether the respondent has ever lived in the following family structures: married two biological parent, cohabiting two biological parent, married stepparent, cohabiting stepparent, single mother and other. This variable is coded so the contrast group is stable two biological parent family and the covariates indicate whether the respondent has ever lived in each of the family types (Wojkiewicz 1993). We also include variables that account for timing of family structure experiences (ages 0-5 or 6-17) and time spent in family types.

We include other variables that are available in our data and have been found to influence adolescent behaviors (e.g., Hill et al. 2001; McLanahan and Sandefur 1994; Manning and Lamb 2003; Sandefur, McLanahan and 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.

Our analyses are based on a series of models using binomial logistic regression. Our first set of analyses assesses the effects of family structure at birth and age 14. 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 next model that includes the control variables. We evaluate whether these measures of family transitions contribute to the fit of the model using both chi-square and BIC statistics.

Our second set of analyses focuses on the dynamic measures of family structure. Our initial model is a bivariate model that includes only the family structure variables. We present a model that adds the remaining covariates to the model to assess whether the family structure effects persist net of the other covariates. We test whether age at family experience or duration in cohabiting parent families fits the data better than models that just account for whether a child ever experienced a particular family form. We assess model fit using chi-square and BIC statistics.

RESULTS

Measurement of Family Structure

Table 2 presents the distribution of our key family structure variables. The first column shows that nearly 7% of children were born to single mothers. The majority of women were born to married two biological parents (83%). These levels match national estimates for the same birth cohorts. Substantially fewer respondents, 4%, were born into cohabiting two

biological parent families. Thus, nearly two-fifths (38%) of respondents born to unmarried

mothers were born to women who were cohabiting.

We next present the distribution of the sample according to family structure at age 14.

Our results demonstrate a considerable shift from family experiences at birth to those in

adolescence. At age 14, one-fifth of respondents were living with single mothers. The

percentage of respondents living with two biological parents declined from birth to only 58.5%

at age 14. At age 14, we find that only 1.5% of respondents were living in cohabiting two

biological parent families. One in eight of respondents were living in married stepparent

families and 2% were living in cohabiting stepparent families.

These results suggest that children are experiencing family change. The third panel of

Table 2 shows that 65% experienced no transitions between birth and age 14. We find that 16%

experience one family transition and 19% experience two or more transitions between their birth

and age 14.

We next show how these measures of stability differ according to family status at birth

and age 14. Among children born to single mothers, we find that three-fifths (59%) remain in

that family type until age 14 and do not experience any family change. Nearly one-quarter

experience one change and 16% experience two or more family transitions. Children born into

two biological married parent families face somewhat similar levels of stability. Table 2 shows

that among children born to two biological married parents two-thirds experience no change in

their family situation, 14% experience one change, and nearly one-fifth (19%) experience two or

more transitions. Children born into married two biological parent and single mother families

experience similar levels of frequent family transitions . Consistent with prior work, we find that

children born to married two biological parents more often experience family transitions than

children born to married two biological parents. We find that less than half of children born into cohabiting two biological parent families experience no change, one-third experience one transition, and one-quarter experience two or more transitions.

Next we shift the perspective from birth to age 14, and show family stability from the lens of age 14. Among children living with single mothers at age 14, nearly three-quarters had experienced some family change. Most children had experienced only one family change (most often marriage or cohabitation) but one-fifth had experience two or more family transitions. Children living in married and cohabiting two biological parent families at age 14 had experienced relatively few transitions. Most transitions are simply parents who married after the birth of the child. Almost all children living in married and cohabiting stepparent families had (by definition) experienced some family change. These children typically had experienced two or more family transitions.

Table 3 presents the cumulative family transitions. Overall, 29% of the children spent some time living with a single mother. The average amount of time spent in single mother families was 6 years. The overwhelming majority of the sample has spent some time in a married two biological parent family and the average duration was 11 years.   By age 14, ten percent of the sample had lived with cohabiting parents.   These experiences were evenly divided between living with two biological parents and one biological parent and the parent's cohabiting partner. We find that one out of twenty children had lived with cohabiting two biological parents by age 14 and the average duration was seven years.   Similarly, our results show that one in twenty children lived with a cohabiting stepparent by age 14 and the average amount of time spent was almost five years. Thus, relatively less time has been spent with cohabiting stepparents than cohabiting two biological parents.   A much higher percentage of children had

spent time in married stepparent families by age 14 and the mean amount of time spent was six years.

The next panel of results shows the percentage of children experiencing each family type during two different age spans: early childhood and later childhood. The gap in experiences across age groups shows movement out of married two biological parent families into single mother and stepparent families. A greater proportion of children age 5 and younger had ever lived with two biological cohabiting parents than had after age 6. Similarly, a lower proportion of children age 5 and younger had ever lived with a cohabiting stepparent than after age 6.

The final panel of Table 3 presents the advantage of using the cumulative measures rather than the indicators at age 14. Our findings show the percentage of experiences in each family type that would be missed if we relied on the age 14 measure rather than the cumulative experience measure. Our findings show that at least half of the experiences in cohabiting parent families are missed when relying on static measures of family experience. Specifically, two-thirds of the experiences in cohabiting two biological parent families are overlooked using the static measure and half of the experiences in cohabiting stepparent families are excluded. Our results show that two-fifths of experiences in single mother families, one-third in married two biological parent families, and one-fifth in married stepparent families are missed when we rely on measures of family structure at age 14. Thus, these results show that experiences in cohabitation are disproportionately under-represented using age 14 indicators of family structure.

Family Structure and Suspension from School

Family Structure at Birth

Table 4 presents the associations of family structure at birth with suspension from school. We present multivariate models but have estimated models that include only the family structure

and family transition variables. We only present the family structure and stability effects in the

tables. The first column of Table 4 shows the effects of family structure at birth on the odds of

being suspended or expelled from school. The results in the first column indicate that children

born to single mothers experience 44% higher odds of being expelled or suspended from school

than children born to married two biological parents. Children born to cohabiting parents

experienced 139% greater odds of being expelled or suspended from school than their

counterparts born to married parents.

The next column includes the covariate measuring family instability. The inclusion of

this covariate contributes to the fit of the model but does not change the direction or magnitude

of the family structure variables. Children born to single or cohabiting mothers have greater

odds of being suspended or expelled from school. Children who experienced more family

transitions had significantly higher odds of being suspended or expelled.

Transitions from Family Structure at Birth

We further examine the impact of family instability on adolescents by examining how

family transitions out of family type at birth influence suspension or expulsion from school.

Table 4.2 shows the model fit statistics and coefficients for a model that includes a series of

dummy variables that measure movement out of family structure at birth. The reference

category is a stable married two biological parent family. The baseline model includes the same

coefficients as presented in the first model in Table 4.1. The comparison models are nested in

the baseline and the fit is assessed using chi-square and BIC statistics.

The model that includes the family transitions following birth improves the fit of the

model. Both the chi-square statistic and BIC statistic show the improved model fit. Women who

were born to cohabiting two biological parent families and single mother families that remained

stable experienced similar odds of suspension or expulsion than women born and raised in married two biological parent families. Thus, children raised in stable environments are not significantly different from one another in terms of being expelled or suspended from school. Children who experience family transitions have higher odds of being expelled or suspended from school than children in their respective stable family type. However, not all children who experience family transitions have similar experiences. Having been raised in an unstable two biological cohabiting parent family is associated with higher odds of suspension or expulsion than having been raised in an unstable two biological married parent family (results not shown).

Family Structure at Age 14

Table 5 presents the effects of family structure age at 14. We find that children living with single mothers have 83% higher odds of being suspended or expelled than children living with married two biological parents. Children living with cohabiting two biological parents share similar odds of being suspended or expelled as children living with married two biological parents. This effect represents children living in stable two biological cohabiting parent families and this result is mirrored in Table 4.2. This indicator does not including children born to cohabiting parents who eventually separated, about half of children born to cohabiting parents.

Children raised in stepfamilies (married and cohabiting) have higher odds of being suspended or expelled than children living with two biological married parents. However, the age 14 indicator of living in a cohabiting stepparent family overlooks about half of children's experiences in cohabiting stepparent families. Furthermore, we find that 14 year olds living in a cohabiting stepparent family have higher odds of being suspended or expelled from school than their counterparts living in a cohabiting two biological parent family (results not shown).

Cumulative Family Experience

Table 6 presents models predicting suspension or expulsion from school. The multivariate model in Table 5 shows that children who lived with single mothers had higher odds of being suspended or expelled from school than their counterparts living in intact, married, two biological parent families. Children who lived with cohabiting two biological parents had significantly higher odds of being suspended or expelled than children who lived in intact, married, two biological parent families. However, this indicator does not distinguish between stable and unstable cohabiting two biological parent famlies.

The results indicate that children who ever lived with married stepparents have similar odds of being suspended or expelled as children who have lived with married two biological parents and this effect is similar at the bivariate level (results not shown). Children who lived with cohabiting stepparents had higher odds of suspension or expulsion than children who lived in intact, married two biological parent families.

Duration and Age Experienced Cohabitation

The effects of family living arrangements may depend on the time spent in each type of family. In Table 7 we evaluate how time spent in cohabiting two biological and cohabiting stepparent families influences each of the outcomes. Our strategy is to replace the family structure coefficient with indicators of time spent in each family type (Wojtkiewicz 1993). The baseline –2 log likelihoods presented in Table 7 are reported in Table 6. We present the p-values for the chi-square tests indicating whether the additional variables improve the fit of the model. BIC statistics with negative values indicate that the model with the additional variables do not contribute to the fit of the model.

The results in the top panel of Table 7 indicate that time spent in cohabiting two biological parent and cohabiting stepparent families is not significantly related to suspension or expulsion. These findings suggest that accounting for duration of time spent in cohabiting two biological and cohabiting stepparent families does not contribute the fit of the model.

The bottom panel two panels of Table 7 presents the effects of age lived in cohabiting two biological and cohabiting stepparent families. Both the chi-square and BIC statistics indicate that the age that a child experiences parental cohabitation (two biological or stepparent) is not significantly related to expulsion or suspension.

DISCUSSION

The prevalence of children in cohabiting family structures has been the impetus for research assessing how this particular family type influences the children. Most of this work relies on measures of family status at the time of interview or for short periods of adolescent's lives. The fundamental aim of this paper is to demonstrate the importance of applying dynamic measures to research on cohabiting parent families.

In 1995 the National Survey of Family Growth included complete family histories that allow us to determine not only the existence of family change, but also the timing of family change. Our results indicate that about half of children born to cohabiting parents experience some family transition by age 14. These levels are higher than that experienced by children born to single mothers (40%) or married parents (33%). Also the vast majority of children who ever lived with cohabiting stepparents experienced some family change, and similar levels are experienced by children who ever lived with married stepparents. Thus, children's family lives often consist of family changes prior to age 14. Efforts to characterize children's experiences should account for the potentially important role of instability.

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These high levels of children's experiences with family change suggest that indicators of family status at any one particular point will most likely underrepresent experiences in different types of families, particularly those family types exhibiting higher levels of instability. We find that relying on measures of two biological cohabiting parent families at age 14 overlooks two-thirds of children's experiences in that family type. Similarly, when we use a measure of cohabiting stepparent families at age 14 we miss half of children's experiences in cohabiting stepparent families. Thus, static measure of family life do not capture the full range of children's experiences in families. Specifically, children's experiences in cohabiting parent families are not well represented by fixed measures of family type.

Our paper is one of the few to examine how cumulative experiences living with cohabiting parents are related to an indicator of adolescent well-being. Our findings suggest that children raised in cohabiting parent families (two biological and step) face higher odds of being expelled or suspended from school. In addition, children who have lived in cohabiting stepparent families appear to have higher odds of being expelled or suspended than children raised in cohabiting two biological parent families. However, the negative effect of living in a cohabiting two biological parent family seems to be related to the stability of that family. Children raised in stable cohabiting two biological faced similar odds of being suspended or expelled from school as children raised in married two biological families. It appears a similar story may exist for children born to single mothers and married two biological parents. We will be examining this issue further.

We assess how the timing and duration of parental cohabitation relates to suspension or expulsion from school. We find that accounting for the timing and duration of parental cohabitation experience does not contribute to the fit of the models. The more parsimonious

model is one that simply accounts for whether a child lived in cohabiting parent family. These results are consistent for both cohabiting two-biological and cohabiting step-parent families. We plan to explore further refinements of the age at which cohabitation was experienced and consider alternative duration measures.

This paper contains several limitations. First, 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 all research in this area and is not within the capacity of researchers to change it (Hoffman 1998). However, we must be mindful that the rate of change in the demographic characteristics of families is not always reflected in the available data. Second, we examine family change only through age 14. We make this restriction so we can contrast our results to the traditional family structure at age 14 measure. Of course we expect to find even higher levels of family change when the sample's age is expanded through age 17. 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 and Cherlin 1995; Powell and Parcel 1997). Further work should pay attention to the possible differential effects for boys and girls. Finally, we consider only one outcome variable. Our analysis is meant to illustrate the importance of accounting for the dynamics of family life and expect that this may matter for other measures of 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.

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 cohabitation has a unique association with an important school behavior, being expelled or suspended. Our work also supports distinguishing cohabiting two biological parents from cohabiting stepparent families. Finally, these findings indicate that we should distinguish between stable and unstable cohabiting parent families.

In terms of measurement issues, full family histories are ideal and permit the analysis of timing of family change. However, there are high costs associated with collecting these types of data. An alternative and more cost efficient strategy is to collect data about whether any family transitions occurred and whether respondents had experienced different types of families. Perhaps additional information about whether respondents lived in these families after a particular age or grade may be one way to incorporate some indicators of timing. As children increasingly experience new family forms and face high levels of family instability, we need to adjust our measurement and analytic strategies to keep up with these family changes.

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TABLE 1. Distribution of Dependent and Control Variables

	%
School Suspension	
No	84.2
Yes	15.8
Race/Ethnicity	
White	67.4
Black	14.7
Hispanic	12.7
Other	5.3
Birth Cohort	
1971-75	49.4
1976-81	50.6
Religiosity	3.2
Mother's Education	12.8
Mother's Employment	
None	26.6
Part-time	18.4
Full-time	55.0
Number of Siblings	2.1
Mother Teenage Birth	
No	85.4
Yes	14.6

N

Note: Weighted percentages and unweighted N.
Source: NSFG 1995

TABLE 2. Distribution of Family Structure Variables

	TOTAL	Number of Transitions		
		0	**1**	**2**
Family Structure at Birth				
Single Mother	6.5	58.6	25.8	15.7
Married Two Biological	83.2	66.9	14.3	18.7
Cohabiting Two Biological	3.9	43.9	31.0	25.1
Other	6.4	52.7	22.1	25.2
Family Structure at Age 14				
Single Mother	16.8	22.7	56.9	20.5
Married Two Biological	58.5	95.7	1.2	3.0
Cohabiting Two Biological	1.5	100.0	0.0	0.0
Married Stepparent	12.7	5.9	18.8	75.4
Cohabiting Stepparent	2.2	10.3	12.2	77.5
Other	8.4	28.4	39.2	32.3
Number of Family Transitions				
0	64.6			
1	16.2			
2+	19.2			
N	2897			

Source: NSFG 1995

TABLE 3. Distribution of Cumulative Family Structure Variables

	TOTAL	Duration
Cumulative Family Experience		
Ever Single Mother	29.0	72.5
Ever Married Two Biological	85.2	138.3
Ever Cohabiting Two Biological	4.6	88.9
Ever Married Stepparent	15.9	72.6
Ever Cohabiting Stepparent	4.7	56.9

	Age	
	0-5	**6-14**
Cumulative Family Experience		
Ever Single Mother	17.4	25.9
Ever Married Two Biological	84.4	72.1
Ever Cohabiting Two Biological	4.4	2.9
Ever Married Stepparent	7.0	15.7
Ever Cohabiting Stepparent	2.0	4.5

Experiences Missed with Age 14 Measures	
Single Mother	40.1
Married Two Biological	32.6
Cohabiting Two Biological	66.9
Married Stepparent	21.3
Cohabiting Stepparent	51.1
N	2897

Source: NSFG 1995

Table 4.1: Family Structure at Birth and Expulsion or Suspension from School

	Model 1	Model 2
Family Structure at Birth (Married Two Biological)		
Single Mother	1.44*	1.43*
Cohabiting Two Biological	2.39***	2.19***
Other	1.28	1.23
Experienced transition		1.65***
-2 Log Likelihood	2503.0	2480.3
N	2897	2897

Note: Reference category in parentheses. Model includes race/ethnicity, birth cohort, religiosity, age mother gave birth, mother's education, mother's employment, and number of siblings.
Source: NSFG 1995
* p < .05, ** p < .01, *** p < .001

TABLE 4.2. Family Structure at Birth Transitions

	-2 Log Likelihood	Diff.	p value	BIC	Family Transition				
					Bio Cohab Stable	Single Mom Stable	Bio Married Change	Bio Cohab Change	Single Mom Change
Suspension/Expulsion									
Baseline	2503.0								
Transition from Birth	2477.2	25.8	.0001	15.4	1.58	1.51	1.63***	4.57***	2.18**

Note: The baseline model does not include the number of transition variable.
BIC=(difference –2 log-likelihood)-(DF difference)(log N)
 p < .05, ** p < .01, *** p < .001
Source: NSFG 1995

Table 5: Family Structure at Age 14 and Expulsion or Suspension from School

	Age 14
Family Structure at Birth (Married Two Biological)	
Single Mother	1.83***
Cohabiting Two Biological	1.43
Married Stepparent	1.49*
Cohabiting Stepparent	4.12***
Other	1.52*
-2 Log Likelihood	2482.8
N	2897

Note: Reference category in parentheses. Model includes race/ethnicity, birth cohort, religiosity, age mother gave birth, mother's education, mother's employment, and number of siblings
Source: NSFG 1995
* p < .05, ** p < .01, *** p < .001

Table 6: Cumulative Family Experience and Suspension Expulsion from School

	Model 1
Cumulative Family Experience[a]	
(Intact Married Two Biological)	
Ever Single Mother	1.46***
Ever Cohabiting Two Biological	1.98***
Ever Married Stepparent	0.95
Ever Cohabiting Stepparent	2.09***
Ever Other	1.21
-2 Log Likelihood	2479.1
N	2897

Note: Reference category in parentheses. Model includes race/ethnicity, birth cohort, religiosity, age mother gave birth, mother's education, mother's employment, and number of siblings
Source: NSFG 1995
* p < .05, ** p < .01, *** p < .001

TABLE 7.1 Time Spent and Age Experienced Cohabiting Parent Families

Time Spent in Cohabiting Two Biological Parent Families

	-2 Log Likelihood	Diff.	p value	BIC	Time Spent		
					<43 months	43-126 months	127+ months
Expel/Suspend							
Baseline	2479.1						
Time Spent	2479.1	0.0	1.0	0.0	--	--	--
Cohabiting Two Biological							

Time Spent in Cohabiting Stepparent Families

	-2 Log Likelihood	Diff.	p value	BIC	Time Spent	
					<43 months	43+ months
Expel/Suspend						
Baseline	2479.1					
Time Spent	2478.7	0.4	.522	-0.9	--	--

Age Experienced Cohabiting Two Biological Parent Families

	-2 Log Likelihood	Diff.	p value	BIC	Age	
					0-5	6-14
Expel/Suspend						
Baseline	2479.1					
Age	2478.6	0.5	.78	-1.2	--	--

Age Experienced Cohabiting Stepparent Families

	-2 Log Likelihood	Diff.	p value	BIC	Time Spent	
					0-5	6-14
Expel/Suspend						
Baseline	2479.1					
Age	2477.8	1.3	.52	-3.2	--	--

Note: Reference category in parentheses. Model includes race/ethnicity, birth cohort, religiosity, age mother gave birth, mother's education, mother's employment, and number of siblings
Source: NSFG 1995
* p < .05, ** p < .01, *** p < .001