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Phone: (419) 372-7279 cfdr@bgnet.bgsu.edu

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Cohabitation and Measurement of Family Trajectories

Wendy D. Manning

Ronald E. Bulanda

Department of Sociology & Center for Family and Demographic Research
Bowling Green State University
Bowling Green, Ohio 43403

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Wendy D. Manning

and

Ronald E. Bulanda

Department of Sociology & Center for Family and Demographic Research
Bowling Green State University
Bowling Green, Ohio 43403

419-372-2850 (p)
419-372-8306 (f)
wmannin@bgnet.bgsu.edu

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Cohabitation and Measurement of Family Trajectories

Cohabitation has grown to become a dominant family form in the United States, one in which is increasingly likely to include children (Smock, 2000). It is anticipated two-fifths of children will spend some time in a cohabiting parent family (Bumpass and Lu, 2000). Yet children's experiences in cohabiting families are often short-lived (Manning, Smock and Majumdar 2004; Raley and Wildsmith). Researchers have started to examine how cohabiting parent families influence the well-being of children. However, to date, much of the current literature addressing this issue utilizes snapshot or static measures of family structure rather than measures which encompass cumulative childhood experiences.

We examine the potential benefits of employing measures of cumulative family experiences instead of measuring family structure at a single point in time (typically age 14). This approach accounts for the often transitory nature of families, especially cohabitation. We also include measures for the child's developmental stage at the time they lived with cohabiting parents as well as length of exposure to cohabiting parent families this work. To illustrate the implications of various measurement strategies we examine how childhood experiences in cohabiting parent families influence a school based indicator of child well-being: suspension/expulsion from school.

BACKGROUND

Cohabitation and Family Trajectories

Recent research focuses on cohabitation as a family type in an attempt to better understanding the effects of family structure on the cognitive, social, behavioral, and psychological well-being of children (e.g., Acs and Nelson, 2002; Brown, 2002; 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). Much of this work draws on measures of family structure at the time of interview. This form of measurement of family life may be problematic for several reasons.

First, cohabiting unions are more relatively unstable and short in duration in contrast to marriages (e.g., Manning, Smock and Majumdar, 2004; Raley and Wildsmith 2004). For example, while 6% of children are found to live in a cohabiting parent family in 1999 (Acs and Nelson, 2001), 40% of children are expected to spend some time in a cohabiting parent family (Bumpass and Lu, 2000). Therefore, using a single point in time to measure family structure results in a substantial underestimate of children who have ever experienced a cohabiting parent family.

Second, the type of cohabiting union is likely to differ based on the age of the children. Overall, nearly 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). In this way, measurements of the current family structure for younger/older children may not accurately reflect the type of cohabiting union experienced by other children.

Third, static measures of family structure for adolescent children may capture a select sample of stable cohabiting unions. Because cohabitation is generally short in duration and experience with cohabiting two biological parent families usually occurs early in a child's life, instances of cohabiting two biological parent families among adolescents likely reflect rare instances of stable cohabiting unions that resembles marriage.

Recent literature supports the need to examine trajectories of family structure to better illustrate 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). However, cohabitation has not been adequately incorporated into most accounts of family experience trajectories. Experiences in cohabiting parent families are often masked by placing cohabiting parent experience as single mother or stepparent family experience or excluding cohabiting parent family experience (e.g., Hill et al., 2001; Sandefur, McLanahan

and Wojtkiewicz, 1992; Wu and Thomson, 2001). Researchers have excluded cohabiting parent families in analysis of family trajectories because of small sample sizes, lack of measurement about cohabitation, or a substantive focus on other family types. In some instances, studies have described childhood experiences in cohabiting parent families, but have not examined the implications of these trajectories for child well-being (Bumpass and Lu, 2000; Graefe and Licther, 1999).

Only a few researchers have applied *cumulative* measures of experience in cohabiting parent families from birth to adolescence to examine child well-being (Dunifon and Kowalski-Jones, 2002; Hao and Xie, 2001; Morrison and Ritualo, 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. Utilizing the National Survey of Youth (NLSY), Dunifon and Kowalski-Jones (2002) focus their study on 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. Furthermore, this work does 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). Yet, prior work that includes full cohabitation family trajectories has not made this distinction (e.g., Hao and Xie, 2001; Dunifon and Kowalski-Jones, 2002). DeLeire and Kalil (2002) distinguish between the experience in cohabiting two biological and cohabiting stepparent families. They use the National Educational Longitudinal Survey to examine late adolescent well-being, but 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. Brown (2004) uses cross-sectional data from the National Survey of American Families and does not find differences in the well-being of children based on their biological relationship to the cohabiting partner (biological or step).

CURRENT INVESTIGATION

Our primary aim is to consider the implications of measurement of parental cohabitation at a single point in time or over the course of childhood. 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 the time of their 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 outcome, suspension or expulsion from school. This measure represents 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. Research indicates that family stability is positively related to child and young adult behavior and negatively related to child development (e.g., Hao & Xie, 2001; Hill et al., 2001; Wu & Martinson, 1993). Family stability may be particularly important in studies of cohabitation because children born to cohabiting parents experience higher levels of instability than children born to married parents (Manning et al., 2004). Hence, 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. This assessment will

include an evaluation of how family structures at birth which remain stable compare to each other, as well as structures that do not remain stable.

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. This type of snapshot measure only informs us about family life at a single point in time and does not reflect experiences in other family types prior to age 14. For example, the measure of living with a single mother at age 14 does not account for teenagers' experiences in other family types that occurred before they were age 14. Similarly, measures of married or cohabiting two biological parent families at age 14 exclude children's experience in married or cohabiting disrupted families. Another reason we examine family structure at age 14 is the latest wave of the National Survey of Family Growth (2002) no longer includes family histories, but instead only asks about family structure at age 14.

Third, we examine whether childhood experience in cohabiting families influences adolescent well-being. We employ measures of cumulative family experience to establish 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 (step vs. biological cohabitation).

We build on this initial assessment and evaluate whether and how the developmental stage, time spent in, and stability of cohabiting parent families influences child well-being. The effects of family structure on child outcomes may vary depending on the 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 cohabiting parent families 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 a specific family structure. Stable families may provide consistent home environment and parenting that may be beneficial to children. We find empirical support for the argument that family change leads to negative outcomes regardless of the family structure (Hao and Xie, 2001; Wojtkiewicz, 1993; Wu and Martinson, 1993). We may find that family instability provides a better predictor of adolescent well-being than family type (cohabiting two biological or cohabiting stepparent families).

Our work contributes to prior literature by explicitly examining the measurement of cohabiting parent families. We build on prior research in two key ways. First, 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, 2004; DeLeire and Kalil, 2001; Hofferth and Anderson, 2003), but to date there has been little attention to the child's family history from birth through adolescence. Second, we examine different ways of capturing children's experience in cohabiting parent families. Previous research has relied on snapshot measures of cohabiting parent family experience (e.g., Acs and Nelson, 2001; Brown, 2004; Manning and Lamb, 2003; Thomson et al., 1994). We include several dynamic measures of children's experiences in cohabiting parent families.

DATA AND METHODS

The 1995 National Survey of Family Growth (NSFG) asks women 15-44 about a wide range of topics that include sexual behavior, fertility, and family formation. The NSFG are one of the few national data sources that ask complete family histories that include cohabitation as a family type. Another advantage of the NSFG is that questions in the data distinguish between cohabiting two biological parent families and cohabiting stepparent families. These data allow us to move beyond current family structure measures and the relatively crude measure of family structure at age 14. The NSFG represents the most current data source available to address two key issues: accounting for two biological parent

cohabiting families and cohabiting step-families; and accounting for the long term dynamic experiences of cohabitation.

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 minimizing 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 women's' adolescent school problem behavior, suspension or expulsion from school. In our sample 15.8% were expelled or suspended from school.

This paper focuses on family structure and we measure family experience in several ways. Several questionnaire items were 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. Additional questionnaire 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. Family structure at birth is coded using the following categories: married two biological parents, single mother, 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.

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. 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. However, we did not identify the marriage of cohabitating partners as a transition. We code a variable that is indicator of family instability and represents the number of changes in family structure. 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.

We use these data to create a measure of family type at age 14. We use this static indicator of family structure to identify six family types. The six family structures include: married two biological, single mother, cohabiting two biological, married stepparent, cohabiting stepparent, and other.

We use more complex family trajectory coding schemes that capture more complete childhood family living experiences. We measure family types at several time points and establish whether the respondent has ever lived in either of the following family structures: marriage two biological, married stepparent, single mother, cohabiting two biological parent, cohabiting stepparent, or other.

These variables are coded so the reference group is respondents who have never experienced the family structure. Our analyses focus on the effects of cohabiting parent family experience. We also include variables that account for the timing of these cohabiting family structure experiences (between the ages of 0-5 or 6-14), as well as the cumulative time spent in these family types.

Our analyses include additional covariates 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 the mother had a teen birth. The distribution of these variables is presented in Table 1.

[INSERT TABLE 1 ABOUT HERE]

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. The sequence of models is the same for assessments of each. We initially test multivariate models to determine how family structure at birth (age 14) influences the outcomes. We then add the measure of family instability in the model to

evaluate whether the effect of family structure at birth (age 14) can be explained by family instability.

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. Specifically, we evaluate a model which includes a series of dummy variables indicating movement out of family structure at birth. The reference category is a stable married two biological parent family. The dummies account for stable and unstable single mother families, , stable and unstable biological cohabiting families, and unstable married biological parent families. The baseline model includes the same coefficients as presented in the first model in Table 5. The comparison models are nested in the baseline and the fit is assessed using chi-square and BIC statistics.

Our second set of analyses focuses on the dynamic measures of family structure. First we present multivariate models assessing the relationship between experience in cohabiting family structures and school suspension/expulsion. We also test whether the number of family transitions, the age at the time of the cohabiting experience, or the duration in cohabiting parent families fits the data better than models that just account for whether a child ever experienced these family forms. These models are not nested so we assess model fit the BIC statistic.

RESULTS

Measurement of Family Structure

Table 2 presents the distribution of our key static family structure variables and shows the stability of these family types. 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%). Substantially fewer respondents, 4%, were born into cohabiting two biological parent families. Our results mirror results from other studies, nearly two-fifths (38%) of respondents born to unmarried mothers were born to women who were cohabiting (Bumpass and Lu 2000).

[INSERT TABLE 2 ABOUT HERE]

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-sixth of respondents were living with single mothers. The percentage of respondents living with married two biological parents declined from birth to only 58% 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 substantial family change. The third panel of Table 2 shows that 65% of the respondents 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. Overall, more than one third of the children experienced at least one change before they turned 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. More than one-quarter experience one change and 15% experience two or more family transitions. Children born into two biological married parent families face somewhat similar levels of family change. Table 2 shows that among children born to two biological married parents two-thirds experience no change in their family situation, 15% experience one change, and nearly one-fifth (19%) experience two or more transitions. Consistent with prior work, we find that children born to cohabiting two biological parents more often experience family transitions than children born to married two biological parents. We find that less than half (44%) 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 a 14 year old. Among children living with single mothers at age 14, nearly three-quarters had experienced some family change. Typically, 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. Children living in stepfamilies at age 14 have experienced frequent transitions with three-quarters having experienced two or more family transitions.

Table 3 presents children's cumulative family structure experiences. 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 (duration is presented in months). 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, nearly ten percent of the sample had lived with a cohabiting parent or cohabiting parents. These experiences were evenly divided between living with two biological parents and one biological parent and the parent's cohabiting partner (4.6% and 4.7% respectively). 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.

[INSERT TABLE 3 ABOUT HERE]

The next panel of results shows the percentage of children experiencing each family type during two different age spans: early childhood and later childhood. Experience of the family structures during these age intervals are not mutually exclusive since the duration of the experience in any family type may begin prior to and end after the age of 6. The gap in experiences across age groups shows movement out of married two biological parent families into single mother and stepparent families. In terms of cohabitation, more respondents experienced biological cohabiting families prior to age 6, whereas cohabiting stepparent families are more prevalent after the age of 6. Among the respondents who have ever lived in a biological cohabiting family structure, nearly 96% had the experience occur, at least partly, prior to the age of 6 (results not shown). In contrast, of the respondents who lived within a cohabiting stepparent family type, 95% had this experience occur, at least partly, sometime between the ages of 6 and 14 (results not shown).

The final panel of Table 3 presents the advantage of using the cumulative measures rather than the static indicators of family structure at age 14. To compare the static and dynamic measurement strategies, we contrast the

percentages of respondents found to live in a particular family structure at the age of 14 versus the respondents' cumulative family structure experiences from birth through 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. We expect to find similar results for any cross-sectional measure of cohabiting parent families.

Family Structure and Suspension from School

Bivariate Relationships

The bivariate relationships between family structure and suspension/expulsion from high school are presented in Table 4. The first panel shows the prevalence of school suspension according to the family structure at birth. While one eighth of the women born to married two biological parents

were suspend or expelled, women born to single mothers were more than twice as likely experience a suspension/expulsion. Nearly two fifths of the respondents with cohabiting two biological parents at birth were suspended or expelled. Our statistical tests indicate that children born to biological two cohabiting parents are significantly more likely to be suspended than children born to single or married mothers.

[INSERT TABLE 4 ABOUT HERE]

The second panel of Table 4 presents the variation in the frequency of school suspensions by family structure at age 14. Approximately 10% of children living with two married biological parents at age 14 were suspended or expelled; the lowest of any family structure at this age. Similar percentages of children living with single mothers (24%) and cohabiting two biological parents (21%) have been suspended or expelled from school. Nearly 19% of the children living with married stepparents and more than one third of women living with cohabiting stepparents at age 14 have been suspended or expelled. Overall, the occurrence of school suspension is greatest among children of cohabiting stepparents at age 14. The frequency of school suspension is greater among children living with cohabiting stepparents than among children living with cohabiting two biological parents at age 14, but only marginally significant due to small sample sizes ($p = .08$).

The final panel of Table 4 shows the frequency of school suspensions according to the children's cumulative family living experiences. Similar to the first two panels, experience in two married biological parent structures is associated with the lowest frequency of school suspensions. More than one fifth of children who have lived with a single mother have been either suspended or expelled from school. The frequency of suspension is similar among children who have ever lived in either a cohabiting two biological or cohabiting stepparent structure (34.8% and 31.1% respectively). It is likely the level of school suspension among children of biological cohabiting parents is higher in this panel than the prior panel because the structure at age 14 measure is comprised of *stable* biological cohabiting families. Women who have been exposed to married stepparent families are more likely to be suspended compared to those exposed to married biological parent families, but have been suspended less often than single mother or either cohabiting parent structures.

Multivariate Models

Family Structure at Birth. Table 5 presents the associations of family structure at birth with suspension from school. We present two multivariate models assessing family structure at birth. The first column of Table 5 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 second model 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 than children born to married biological parents of being suspended or expelled from school. Children who experienced more family transitions had significantly higher odds of being suspended or expelled.

The model which includes the series of dummy variables accounting for stable and unstable family trajectories from the time of birth improves the fit of the model (results not shown). Both the chi-square statistic and BIC statistic show the improved model fit. Ultimately, women born to cohabiting two biological parent families and single mother families which remained stable (no transitions) experienced similar odds of suspension or expulsion compared to women born and raised in stable married two biological parent families. Thus, children raised in stable environments, regardless of family structure, are not significantly different from one another in terms of being expelled or suspended from school. Children who experience family transitions (measured as unstable) have higher odds of being expelled or suspended from school than children in

their respective stable family type. However, this does not suggest 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).

[INSERT TABLE 5 ABOUT HERE]

Family Structure at Age 14. The final two columns of Table 5 present the relationships of family structure at age 14 with school suspensions. The third model shows the effects of family structure at age 14 on the odds of being suspended or expelled from school without controlling for the number of transitions. We find that children living with single mothers have 85% 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 (since they most often begin in early childhood/birth). Hence, this indicator does not include children born to cohabiting parents who eventually separated, which encompass nearly half of all children born to cohabiting parents. In addition, some of the covariates reduce the comparison between biological cohabiting parent and biological married parent families to statistical non-significance. Subsequent evaluations indicate race/ethnicity,

maternal education, and having a teen birth supercede the effects of growing up in a biological cohabiting parent family on school suspensions.

Model 3 also indicates children raised in stepfamilies (married and cohabiting) have higher odds of being suspended or expelled than children living with married two biological parents. However, the age 14 indicator of living in a cohabiting stepparent family overlooks about half of children's experiences in cohabiting stepparent families (Table 3). 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).

The final model of Table 5 adds the measure of the number of family transitions to account for family instability. The addition of this indicator does not add to the fit of the model or substantially change the direction of the family structure variables. The comparison between married stepparents and married biological parents is somewhat effected ($p = .06$). However, net of the transitions, 14 year olds living with cohabiting stepparents still have higher odds of being suspended or expelled compared to those living with cohabiting two biological parents (results not shown).

Cumulative Family Experience. Table 6 presents models predicting suspension or expulsion from school. The first model in Table 6 shows that children who ever lived with cohabiting two biological parents had nearly 100%

greater odds of being suspended or expelled from school than their counterparts who had not experienced this family type. The results presented in the second model of Table 6 indicate that children who ever lived with cohabiting stepparents had substantially greater odds of being suspended or expelled as children who have never lived with in this structure.

[INSERT TABLE 6 ABOUT HERE]

In Table 7, we evaluate how family transitions, the age at the time of the cohabiting experience, and the duration within cohabiting parent families influence school suspension/expulsion. We substitute the family structure measures (Table 6) with indicators of transitions, age of experience, and duration for each type of cohabiting family experience (Wojtkiewicz, 1993). The baseline model for biological cohabitation is the first model of Table 6 and the baseline model for step-cohabitation is the second model of Table 6. The BIC statistic for each new model is reported in the first column of Table 7. The differences in the BIC between the baseline and the new models are reported in the second column.

[INSERT TABLE 8 ABOUT HERE]

The results in the top panel of Table 7 focus on cohabiting two biological parent families. These results indicate the baseline model has the lowest BIC value within the panel, suggesting this model represents the best fit. Furthermore, these results demonstrate our understanding of the relationship between biological cohabitation and women's school suspension is not improved using any of the

alternate measures. Accounting for the number of transitions, the age of the biological cohabitation experience, or the duration in a biological cohabiting structure does not improve our evaluation of the relationship between ever having lived in this family structure and school suspension.

Further investigation shows that children who live with cohabiting two biological parents share similar odds of suspension or expulsion based on their age and exposure to cohabiting parent families (results not shown). Respondents who lived in stable cohabiting two biological parent families had lower odds of suspension or expulsion than their counterparts who lived in unstable cohabiting two biological parent families (results not shown).

The results in the bottom panel of Table 7 focus on cohabiting stepparent families. Similar to the first panel, these results also suggest the baseline model has the lowest BIC value and represents the best fit compared to the alternate models. In other words, these results demonstrate our understanding of the relationship between cohabiting stepfamilies and women's school suspension is not improved using any of the alternate measures (transitions, age of experience, or duration of experience). Additional analyses of children who lived with cohabiting stepparents indicate that the odds of suspension or expulsion from school are not associated with the age the child lived with, exposure to, or stability of cohabiting stepparents (results not shown).

DISCUSSION

Growing research that assesses how parental cohabitation influences child well-being reflects the increasing prevalence of children in cohabiting parent families. 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 and change.

These high levels of children's experiences with family change suggest that indicators of family status at any one particular point will most likely under-represent 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 measures 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 who ever experience a 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 exposed to 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 who experience a stable cohabiting two biological family face similar odds of being suspended or expelled from school as children who experience a married two biological parent family.

We also assess how transitions as well as the timing and duration of parental cohabitation relate to suspension or expulsion from school. We find that accounting for transitions, or the timing and duration of parental cohabitation

experiences does not contribute to the fit of the models. The more parsimonious model is one that simply accounts for whether a child lived in a cohabiting parent family. These results are consistent for both cohabiting two-biological and cohabiting step-parent families.

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. Second, we examine family change only through age 14. We make this restriction so we can contrast our results to the traditional family structure measure at age 14. 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 simply 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 child outcomes.

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 pace with these family changes.

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TABLE 1. Distribution of Dependent and Control Variables

	%
Dependent Variable	
School Suspension	
No	84.2
Yes	15.8
Control Variables	
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	2897

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	26.6	14.8
Married Two Biological	83.2	66.9	14.5	18.6
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	58.4	95.8	1.2	3.0
Cohabiting Two Biological	1.5	100.0	0.0	0.0
Married Stepparent	12.7	5.9	19.5	74.6
Cohabiting Stepparent	2.2	10.3	15.2	74.5
Other	8.4	28.4	39.2	32.3
Number of Family Transitions				
0	64.6			
1	16.4			
2+	19.0			
N	2897			

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

TABLE 3. Distribution of Cumulative Family Structure Variables

	TOTAL	Duration[a]		
		.25	.50	.75
Cumulative Family Experience				
Ever Single Mother	29.0	26	59	108
Ever Married Two Biological	85.0	123	167	167
Ever Cohabiting Two Biological	4.6	21	74	167
Ever Married Stepparent	15.9	35	69	110
Ever Cohabiting Stepparent	4.7	18	51	81

	Age		Stable Family
	0-5	6-14	(0-14)
Cumulative Family Experience			
Ever Single Mother	17.4	25.9	86.9
Ever Married Two Biological	84.4	71.9	33.7
Ever Cohabiting Two Biological	4.4	2.8	62.1
Ever Married Stepparent	7.0	15.7	95.3
Ever Cohabiting Stepparent	2.0	4.5	95.2

Experiences Missed with Age 14 Measures

Single Mother	42.0
Married Two Biological	31.4
Cohabiting Two Biological	66.9
Married Stepparent	20.3
Cohabiting Stepparent	53.2
N	2897

Note: Weighted percentages and unweighted N.
[a] Duration is measured in months
Source: NSFG 1995

Table 4. Bivariate relationships between family experiences and school suspension/expulsion

	Suspension
Family Structure at Birth	
Married Two Biological	13.4
Single Mother	29.9[a]
Cohabiting Two Biological	37.8[ab]
Other	19.3[ac]
Family Structure at Age 14	
Married Two Biological	11.3
Single Mother	24.3[a]
Cohabiting Two Biological	20.6[a]
Married Stepparent	18.5[ab]
Cohabiting Stepparent	36.5[abd]
Other	20.3[ae]
Childhood Family Experience	
Ever Married Two Biological	13.7
Ever Single Mother	22.7[a]
Ever Cohabiting Two Biological	34.8[ab]
Ever Married Stepparent	18.8[abc]
Ever Cohabiting Stepparent	31.1[abd]

Source: NSFG 1995
Note: Weighted percentages and significance tests are based on comparisons of the two specified family types.

[a] Significantly different from married biological at $p < .05$

[b] Significantly different from single mother at $p < .05$

[c] Significantly different from cohabiting biological at $p < .05$

[d] Significantly different from married stepparent at $p < .05$

[e] Significantly different from cohabiting step at $p < .05$

Table 5. Odds ratios of family structure at birth and age 14

	Birth		Age 14	
	Model 1	Model 2	Model 3	Model 4
Family Structure at Birth				
(Married Two Biological)				
Single Mother	1.44*	1.43*		
Cohabiting Two Biological	2.39***	2.31***		
Other	1.28	1.25		
Family Structure at 14				
(Married Two Biological)				
Single Mother			1.85***	1.79***
Cohabiting Two Biological			1.48	1.48
Married Stepparent			1.50*	1.43
Cohabiting Stepparent			4.14***	3.91***
Other			1.53*	1.47*
Number of Transitions		1.15***		1.03
Race/Ethnicity				
(White)				
Black	2.23***	2.30***	2.37***	2.39***
Hispanic	1.37*	1.39*	1.43*	1.43*
Other	0.92	0.95	1.00	1.01
Birth Cohort				
(1970-74)				
1976-1981	1.07	1.05	1.03	1.03
Religiosity	0.82***	0.83***	0.83***	0.83***
Mother's Education	0.94***	0.94***	0.94***	0.94***
Mother's Employment				
None	0.82	0.86	0.87	0.88
Part-time	1.02	1.04	1.07	1.07
(Full-time)				
Number of Siblings	0.96	0.96	0.97	0.97
Mother Teenage Birth	1.83***	1.77***	1.76***	1.76***
-2 Log Likelihood	2503.0	2492.4	2482.3	2482.0
N		2897		

* p < .05 ** p < .01 *** p < .001

Table 6: Odds ratios of cumulative family experience

	Suspension/Expulsion	
Cohabiting Family Experience		
Ever Cohabiting Two Biological	1.98***	
Ever Cohabiting Stepparent		2.36***
Race/Ethnicity		
(White)		
Black	2.51***	2.74***
Hispanic	1.43*	1.50**
Other	0.93	0.98
Birth Cohort		
(1970-74)		
1976-1981	1.08	1.06
Religiosity	0.81***	0.82***
Mother's Education	0.94***	0.94***
Mother's Employment		
None	0.83	0.85
Part-time	1.03	1.04
(Full-time)		
Number of Siblings	0.95	0.96
Mother Teenage Birth	1.90***	1.86***
-2 Log likelihood	2510.5	2505.7
N	2897	2897

Source: NSFG-95

Table 7. Model Fit for Transitions, Exposure, and Age Experienced Cohabiting Parent

Cohabiting Parent Families

	BIC	Diff.
Biological Cohabitation		
Baseline	-20487	
Transitions	-20477	9.9
Age	-20479	8.1
Exposure	-20471	15.6
Step-Cohabitation		
Baseline	-20492	
Transitions	-20476	15.8
Age	-20485	6.7
Exposure	-20485	7.3

Source: NSFG 1995