

Family Stability and Child Well-being during Early Childhood*

Susan L. Brown
Department of Sociology and
Center for Family and Demographic Research
222 Williams Hall
Bowling Green State University
(419) 372-9521
browns1@bgnet.bgsu.edu

DRAFT—PLEASE DO NOT QUOTE OR CITE WITHOUT PERMISSION

* The research for this paper is supported by a grant to the author from the National Institute of Child Health and Human Development (K01-HD42478) and by the Center for Family and Demographic Research, Bowling Green State University, which has core funding from the National Institute for Child Health and Human Development (R24-HD050959).

Family Stability and Child Well-being during Early Childhood

Abstract

Using data from the first two waves of the Early Childhood Longitudinal Study-Birth Cohort (ECLS-B), I examine the linkages between family stability and child outcomes for very young children. Although most 9 month-olds reside in either two biological married parent (65%) or single-mother (20%) families, roughly 14% live in two biological cohabiting parent families (the remaining 1% are in stepfamilies). Two biological cohabiting parent families are considerably less stable than two biological married parent families. Nearly 30% of children in two biological cohabiting parent families experience a change in family structure between the 9-month and 24-month interviews versus fewer than 2% of children in two biological married parent families. Transitions out of a cohabiting family into a married or single-mother family do not appear to be detrimental to mental and motor development. In fact, moving from a cohabiting to a single-mother family is associated with larger gains in mental development than remaining in a stable two biological parent cohabiting family.

Family Stability and Child Well-being during Early Childhood

Children's living arrangements have become increasingly diverse and complex in recent decades. The share of children residing with two biological married parents has been steadily declining and the proportions of children living in stepfamilies or families formed outside of marriage, including single-parent and cohabiting families, are at all-time highs (U. S. Bureau of the Census 2001). Cohabitation is an increasingly common family context; recent estimates indicate that nearly 20% of births are to cohabiting parents and about 40% of all children will spend some time in a cohabiting family by age 16 (Bumpass and Lu 2000).

Children can enter cohabiting families through multiple pathways. Some children are born to cohabiting couples; nearly 50% of all births to single mothers are actually to unmarried cohabiting parents (i.e., two biological parent cohabiting families) (Kennedy and Bumpass 2007). Still others enter cohabiting families at some point after birth to a single mother, or following the break-up of the parental marriage. This latter scenario can be described as a cohabiting stepfamily since the mother's partner is not the biological parent of the child. Thus, cohabiting families can be comprised of either two biological unmarried parents or one biological parent and a partner. Roughly equal numbers of children reside in these two types of cohabiting families (Manning and Brown 2006). Nonetheless, nearly all of the research (see Manning 2002 for a summary; notable exceptions include Artis 2007; Brown 2000) on the well-being of children in cohabiting families has been restricted to cohabiting stepfamilies, primarily because most large-scale studies (i.e., those using nationally representative data) examine children in middle childhood or adolescence. The high levels of instability characterizing cohabiting families mean that nearly all school-aged children and teenagers live in cohabiting

stepfamilies (Brown 2004). Indeed, roughly 85% of children in two biological cohabiting parent families are under age six (Brown 2000).

Thus, researchers still know relatively little about cohabitation as a setting for child development (Chase-Lansdale 1998), *especially for very young children*. I use the first two waves of Early Childhood Longitudinal Study-Birth Cohort (ECLS-B) data to examine the linkages between family stability and child well-being. First, I document the level and types of family instability, operationalized as family structure changes between waves one and two. Second, I assess whether and how instability is associated with changes in child well-being and the extent to which these associations are mediated by changes in economic circumstances and parenting behaviors.

Background

Both family structure and stability play important roles in child well-being (e.g., Hao and Xie 2002; Hill, Yeung, and Duncan 2001; Sandefur and Mosley 1997; Wu 1996; Wu and Martinson 1993). Children who reside outside of a two biological married parent family tend to exhibit lower levels of well-being, on average, across several domains, including social, emotional, academic, and behavioral outcomes. Much of these observed differences are accounted for by economic circumstances and parenting behaviors (Brown 2004; Manning and Lamb 2003; McLanahan and Sandefur 1994).

The variation in child well-being across other, less “traditional” family forms is comparatively small. For instance, it appears that children fare similarly in married stepfamilies and single-mother families (McLanahan and Sandefur 1994). The benefits of residing in a stepfamily, such as the presence of two adults and a larger family income, are undermined by the significant relationship and emotional stressors stepfamily members face as they confront

considerable challenges to effective functioning, namely, the renegotiation of family roles (Hetherington and Jodl 1994). In single-mother families, the presence of just one adult arguably means less supervision and monitoring as well as fewer economic resources, but at the same time children do not have to deal with the relationship challenges that typically accompany the formation of a stepfamily.

How children in cohabiting families compare to those in single-mother or married step families is less clear (Manning 2002). Some studies find few differences in child well-being across these three groups (Manning and Lamb 2003), while other research indicates children in cohabiting families typically fare worse than their counterparts in single-mother families and married stepfamilies (Artis 2007; Brown 2006, 2004). The lower levels of well-being characterizing children in cohabiting families are largely explained by economic and parenting factors. Poverty levels are twice as high in cohabiting (20%) versus married step (10%) families and three times as high in two biological cohabiting (23%) versus married (7%) families (Manning and Brown 2006). Parenting behaviors also differ by family type such that cohabiting mothers report greater difficulty rearing their children and higher levels of depressive symptoms (Brown 2002, 2000; DeKleyen et al. 2006). One study that specifically compares parenting behaviors across cohabiting, single, and married mothers of infants shows that the mother-infant relationship is of highest quality for marrieds, whereas cohabitators and singles do not differ (Aronson and Huston 2004). These differences are not attenuated by the inclusion of mother's mental health, economic factors, social support, and so forth.

Family stability is positively associated with child well-being, whereas family transitions are related to declines in child outcomes (DeLeire and Kalil 2002; Wu and Thomson 2001). In fact, the negative effects on children's outcomes accumulate with each transition into or out of

marriage (Cherlin et al. 1991; Wu 1996; Wu and Martinson 1993). Family transitions are stressful for adults and children for several interrelated reasons (e.g., Cherlin et al. 1991; Hetherington, Bridges, and Insabella 1998; Wu 1996; Wu and Martinson 1993). They involve a shift in household membership and a reorganization of family roles which in turn disrupts family routines, resulting in inconsistent parenting. Poor parenting can contribute to emotional insecurity among children and lower parent-child relationship quality. Moreover, family transitions can decrease available resources such as money and time (McLanahan and Sandefur 1994).

This pattern of findings emerges from research that has focused exclusively on marital transitions, that is, transitions out of a two biological married family through divorce or transitions into a married stepfamily. To my knowledge, only one study (Brown 2006) has used nationally representative data to examine how cohabitation transitions are related to child well-being despite the high levels of instability characterizing cohabiting families (Bumpass and Lu 2000). Adolescents do not appear to benefit from remaining in stable cohabiting stepfamilies and, in fact, for some aspects of well-being, transitioning out of a cohabiting family into a single-mother family is related to gains in well-being (Brown 2006). No research has considered how parental cohabitation transitions are related to the well-being of very young children.

This line of inquiry is important because cohabiting families are less stable than either married families or single-mother families in which the mother does not cohabit (Graefe and Lichter 1999; Manning, Smock, and Majumdar 2004; Raley and Wildsmith 2004). Relative to being born to married parents, children born to cohabiting parents are twice as likely to experience the break up of their parents' relationship, net of sociodemographic factors (Manning et al. 2004). Moreover, formalization of a cohabiting relationship through marriage does not

reduce the odds of breakup to a level comparable to that for children born to married parents. Children's risk of family instability depends in large part on their family structure at birth (Graefe and Lichter 1999; Manning et al. 2004; Raley and Wildsmith 2004). Whereas a majority of children born to married parents can expect to experience no living arrangement transition during the first 12 years of life, most of those born to single mothers and nearly all of those born to cohabiting parents will transition into other family forms before age 12 (Raley and Wildsmith 2004).

The Present Study

The present study is designed to (a) document the level and patterns of family transitions experienced by young children and (b) examine how various types of transitions (versus stable family forms) are related to changes in child outcomes between interviews. Two biological cohabiting parent families should be considerably less stable than two biological married parent families, with single-mother families in between. Other research has shown that over 90% of children born to or residing in a cohabiting family experience a living arrangement transition within five years and most of those are into a single-mother rather than a married family (Graefe and Lichter 1999). I examine how experiencing a family structure change is associated with changes in child well-being as well as whether these changes are artifacts of concurrent shifts in parenting behaviors and economic resources. Family instability tends to disrupt parenting routines which in turn undermines children's well-being (e.g., McLanahan and Sandefur 1994). Thus, a living arrangement change between interviews should be associated with declines in parenting effectiveness and child well-being. I consider the type of family structure change (e.g., moving from a cohabiting to single-mother family versus a married to single-mother family) since prior research indicates transitions out of cohabitation can be beneficial and some forms of

stability, particularly remaining in a cohabiting family, actually can be detrimental (Brown 2006).

The current research fills significant gaps in research on cohabitation and children's outcomes by (a) examining this relationship among very young children, (b) focusing on two biological cohabiting parent families, and (c) considering transitions into and out of cohabitation. The ECLS-B is advantageous for this study because it permits a comparison of a large, nationally representative sample of infants in two biological cohabiting parent, two biological married parent, and single-mother families across multiple indicators of child well-being. Additionally, children can be followed over time to document the levels and consequences of family instability. A significant advantage of the current study is that it permits a prospective examination of the consequences of family instability among children who are young enough that the possibility they have experienced prior, unmeasured transitions is minimal. Unlike prior research on cohabitation and children's well-being which has excluded young children, the ECLS-B permits a rich analysis of family structure, family processes, and child well-being during the first years of life, a period that is critical to successful child development and school achievement.

Method

The ECLS-B is a nationally representative sample of 10,700 births in 2001.¹ The data include parent interviews and self-administered questionnaires, birth certificate information, and direct child assessments by skilled interviewers. The initial wave of data was collected when children averaged 9 months of age and the follow-up occurred at about 24 months of age. For this study, the analytic sample includes the 8,700 cases in which the main parent respondent is either the

¹ All Ns reported in this manuscript have been rounded to the nearest 50 per contractual agreement with the National Center for Education Statistics (to protect confidentiality of respondents).

biological or adoptive mother of the child, for whom there are valid data on parent marital status and the child weight at both waves, and who are classified as being in either a two biological cohabiting parent family, a two biological married parent family, or a single-mother family at the 9 month interview.

Child Well-being

The two measures of child well-being, which come from direct child assessments, are ascertained at both waves. They are derived from the Bayley Short Form-Research Edition (BSF-R) and capture the child's *mental* and *motor development*. The mental scale assesses early cognitive and language ability (e.g., putting blocks in a cup or responding to a parent's request) whereas the motor scale assesses physical development, including gross and fine motor skills (e.g., crawling, walking, and picking up objects). The items are developmentally appropriate and thus some differ at the 24 month interview from those administered during the 9 month interview.

Family Structure

Family structure is captured at the baseline interview using the constructed measure of marital status as well as the two items from the parent questionnaire concerning the presence of a spouse or partner in the household and the absence of the biological father from the household. *Family structure* distinguishes among five family types: two biological cohabiting parents, two biological married parents, single-mother, cohabiting step, and married step family. The distribution of the sample across these five categories is shown in Table 1.

Family Stability

The measures of family (in)stability are created using measures of family structure at baseline and re-interview. Using the wave two measures of parent's marital status, the presence of a

spouse or partner in the household, and the absence of the biological father from the household, the same five family structure categories as described above are coded. Then, using the two measures of family structure, transitions are identified. Not all possible transitions actually occur, as shown in Table 2. The following types of transitions are examined in the longitudinal analyses: *two biological cohabiting parents to two biological married parents*, *two biological cohabiting parents to single-mother*, *two biological married parents to single-mother*, and *single-mother to two parent family*.² The three possible stable family forms include *two biological cohabiting parent*, *two biological married parent* (reference), or *single-mother family*.

Child and Maternal Characteristics

Child characteristics include the *child's age in months* (measured at wave two), the *child's gender* (measured at wave two), and the *child's race-ethnicity* (measured at wave one as Non-Hispanic Black, Hispanic, Non-Hispanic Other, and Non-Hispanic White (reference)). *Maternal age at child's birth* is coded into five-year intervals: less than 20, 20-24, 25-29, 30-34, and more than 34 (reference). *Smoked* is a dummy variable that is coded 1 if the mother reports having smoked cigarettes during the last three months of pregnancy and 0 otherwise. *Drank* is a dummy variable coded 1 if the mother reports having consumed alcohol during the last three months of pregnancy and 0 otherwise. *Breastfeeding* activity is captured using three mutually exclusive and exhaustive dummy variables: previously breastfed the child, never breast fed the child, and currently breastfeeds the child (reference). *Normal birth weight* is a dummy variable that distinguishes births of normal weight (coded 1) from low weight births (coded 0).

² Note that transitions out of a single-mother family are roughly equally distributed across two biological cohabiting, two biological married, cohabiting step, and married step families, yielding small sizes. Since the primary goal of the paper is to compare two biological cohabiting versus two biological married families, all transitions out of a single-mother family are lumped together. This approach should not be interpreted as implying that the four types of transitions out of a single-mother family would not differ from one another but rather such distinctions are not of substantive interest in the present study.

Economic Resources

Maternal labor force participation captures the amount of time the mother is employed: full-time (i.e., 35 or more hours per week), part-time (reference), and not working. *Maternal education* is measured using a series of dummy variables: no high school degree, high school degree or GED (reference), some college, and college degree or more. *Family income* is a constructed variable in the data set. For the analyses, *maternal labor force participation changes* are considered: an increase in labor force participation (i.e., moving from not working to either part-time or full-time or from part-time to full-time), a decrease in labor force participation (i.e., moving from full-time to either part-time or not working or from part-time to not working), or no change in labor force participation. *Family income change* is the difference between the constructed income variable at wave two and wave one.

Parenting Resources

Maternal responsiveness is a scale composed of items coming from direct assessment by the interviewer. It is measured both at the baseline and follow-up interviews. Consistent with Bradley et al. (2001), I include the following five items in the maternal responsiveness scale: mother spontaneously spoke to the child twice or more, mother responded verbally to the child's speech, mother caressed, kissed, or hugged the child at least once, mother provided toys or interesting activities for the child, and mother kept child in view. The Cronbach's alpha at wave one is 0.54 and at wave two is 0.66. *Child is difficult to raise* is also measured at both waves and is the mother's evaluation of how hard it is to parent her child, ranging from 1 not at all difficult to 5 very difficult. *Literary activities scale*, captured at both waves, sums the frequency with which the mother reads books to her child, tells stories to her child, and sings songs with her child. For each of these three items, values range from 1 not at all to 4 every day. According to

the psychometric report for the ECLS-B data (Andreassen and Fletcher 2005), these three items represent the extent to which parents engage in literary activities with their child. The Cronbach's alpha at wave one is 0.61 and at wave two is 0.59. *Maternal depressive symptoms* are measured using the items from the CES-D in the baseline self-administered questionnaire. Examples of the 12 items include the frequency with which the mother felt fearful, had a poor appetite, and could not get going. The overall measure of depressive symptoms is coded as suggested by the ECLS-B 9 month User's Guide (page 3-47). The Cronbach's alpha is 0.87. About 10% of the mothers did not respond to these items and therefore a dummy variable flags imputed values in the multivariate models. Change variables measure the differences between the wave two and wave one values of responsiveness, difficulty of raising the child, and literary activities with the child and are used in the longitudinal models that examine family transitions. Since the items measuring maternal depressive symptoms differ in wave two, the baseline measure is retained in the longitudinal models.

Analytic Strategy

I begin by documenting family structure and stability patterns. The distribution of children across family structures is shown in Table 1. Note that the sample size is a bit larger here (all children residing with a biological or adoptive mother for whom there is valid information on marital status at wave one, $N=10,100$) to provide a more complete portrait. Types of family transitions and stability are shown in Table 2 ($N=8,700$).

Next, I consider how changes in family structure are related to changes in child well-being using both waves of data. I estimate five models for each of the two dependent variables. The first model includes family transitions and stability as well as the baseline value of the dependent variable. The second model adds the child and maternal characteristics. The third and

fourth models separately add to the second model changes in economic resources and parenting behaviors, respectively. The fifth model includes all of these variables. The actual size of the analytic sample varies slightly across dependent variables as cases for which there is no valid value on the dependent variable are excluded. All analyses account for the complex sampling design of the ECLS-B by including corrected standard errors derived from AM software using replicate weighting techniques (wave two child weights).

Results

Descriptive Results

As shown in Table 1, over three-quarters of children reside in two biological parent families at baseline. Of course, most children reside with married rather than cohabiting two biological parents, but close to one in five live in a cohabiting family. About two-thirds of the sample is in two biological married parent families whereas almost 14% is in two biological parent cohabiting families. About 20% of children live with single-mothers. Fewer than 2% of children live in either a cohabiting or married stepfamily.

[TABLE 1 ABOUT HERE]

Two biological cohabiting parent families are much less stable, on average, than two biological married parent families. Of those children residing in two biological cohabiting families at baseline, only 70% remain in this family form roughly one year later. Notably, those who transition to another family type are more likely to move into a single-mother family (18%) than to experience the formalization of their parents' union through marriage (12%). Two biological married parent families are exceptionally stable; less than 2% of children in this family form at baseline are living in single-mother families (presumably because their biological parents either separated or divorced) at re-interview. As expected, single-mother families are

less stable than two biological married parent families but more stable than two biological cohabiting families. About 22% of children residing with a single mother at the baseline interview transition into some type of two parent family (most often a two biological cohabiting parent family). Given the short time interval between the two waves of data collection, the levels of instability for those in two biological cohabiting parent families and single-mother families is striking.

[TABLE 2 ABOUT HERE]

Multivariate Results

Turning now to the longitudinal analyses of the linkages between family stability and changes in child well-being, Table 3 shows the five models predicting the child's mental scale score at wave two. As shown in Model 1, the wave one score is positively associated with the wave two score. Children who did not reside in a two biological parent family at baseline exhibit smaller gains in mental development, on average. Relative to children remaining in two biological married parent families, only those who transitioned from a two biological married parent family to a single-mother family exhibit similar increases in scores (the absence of a statistical difference may reflect inadequate statistical power due to small cell size). Supplemental tests reveal that formalization of a cohabiting family through marriage is associated with larger increases mental development than remaining in a stable two biological cohabiting parent family. Similarly, moving out of a two biological cohabiting parent family into a single-mother family is also associated with larger increases in mental development than remaining in a stable two biological cohabiting parent family. This pattern of findings indicates that some types of transitions may be beneficial for children and, conversely, some types of stability may not be particularly advantageous for children.

[TABLE 3 ABOUT HERE]

Model 2 introduces the child and maternal characteristics, which appear to account for much of the effects of family change on changes in mental development. Children whose parents formalize their cohabiting union through marriage experience marginally ($p < .10$) smaller gains in mental development than children with continuously married parents. Notably though, children in continuously cohabiting and continuously single-mother families also exhibit smaller increases in mental development than children in continuously married families. Children who move from a two biological cohabiting parent family to a single-mother family exhibit greater growth in their mental development, on average, than remaining in a stable two biological cohabiting parent family. Formalizing the cohabiting union through marriage offers no advantage over remaining in a stable cohabiting family (result not shown). Child age and normal birth weight are positively related to mental development. Boys, nonwhites, and children of mothers who smoked during pregnancy or are not currently breastfed show smaller gains in mental development.

The introduction of economic factors in Model 3 reduces the effect of transitioning from a two biological cohabiting parent family to a two biological married parent family to nonsignificance. Children in continuously single-mother families also no longer differ from those in continuously two biological married parent families, suggesting this differential was primarily a function of economic factors. The increase in mental development of children who transition from a two biological cohabiting parent family to a single-mother family remains marginally ($p < .10$) greater than that for children who are in a stable two biological cohabiting parent family. Maternal education is positively related to children's mental development.

Model 4 shows the effects of changes in parenting behaviors on changes in mental development. Children who transition from a two biological cohabiting parent family to a two biological married parent family show smaller gains in mental development than those in stable two biological married parent families. Stable single-mother and stable two biological cohabiting parent families are associated with smaller increases in mental development relative to stable two biological married parent families. Again, moving out of a cohabiting family into a single mother family is associated with greater increases in mental development than remaining in the cohabiting family. But, formalizing the cohabiting union through marriage offers no appreciable benefit relative to remaining in the cohabiting family (result not shown).

The full model, shown in Model 5, reveals few differences in mental development across family types. In fact, the only family type to significantly differ from the continuously married two biological parent family is the continuously cohabiting two biological parent family, in which children experience smaller gains in mental scale scores, on average. Children who transition out of a two biological cohabiting family into a single-mother family experience marginally ($p < .10$) greater gains in mental development than those who remain in stable cohabiting families.

The set of models shown in Table 4 predict motor development at wave two. As shown in Model 1, there are few effects of family type; children in stable two biological cohabiting families exhibit smaller increases in motor development, on average, than children in stable two biological married families. Transitioning out of a cohabiting family into either a two biological married parent or single-mother family does not appreciably differ from remaining in a cohabiting family in terms of motor development (results not shown).

[TABLE 4 ABOUT HERE]

Model 2 includes the child and maternal characteristics. Now, both types of stable families—stable single-mother and stable two biological cohabiting parent—experience smaller increases in motor development. Again, exiting a cohabiting family (whether through marriage or dissolution) does not differ from remaining in a cohabiting family (results not shown). Child age and normal birth weight are positively associated with greater gains in motor development. Boys, blacks, Hispanics, and children whose mother smoked during pregnancy tend to have smaller increases in motor development.

The third model adds changes in economic resources. The pattern of findings persists and none of the economic change variables is statistically significant.

In Model 4, changes in parenting are included. Here again, the basic pattern remains, that is, children in stable single-mother or two biological cohabiting families show smaller increases in motor development, although at a marginal level of significance ($p < .10$). Increases in maternal responsiveness are related to increases in motor development.

Finally, the full model, which is shown in Model 5, indicates that the difference in motor development between children in two biological cohabiting versus married parent families is accounted for by child and maternal characteristics as well as changes in economic circumstances and parenting behaviors. Children in stable single-mother families continue to experience (at a marginal level of significance, $p < .10$) smaller gains in motor development than their counterparts in stable two biological married parent families.

Discussion

The goals of this study were to document patterns of family stability during early childhood and examine their relationship to child outcomes, with an emphasis on comparisons of children residing in two biological cohabiting versus married parent families. The rapid growth in

cohabitation has led to a large increase in number of births that are to cohabiting parents. Nearly one-half of nonmarital births occur to two biological cohabiting parents (Kennedy and Bumpass 2007). At first glance, one may assume that being raised by two biological parents is an ideal family environment and whether the parents are formally married is irrelevant for child outcomes. But the few studies to examine child well-being in two biological cohabiting parent families show that these children tend to fare worse than their counterparts in two biological married parent families, appearing more similar instead to those in stepfamilies and single-mother families (Artis 2007; Brown 2004, 2002).

Using data from the first two waves of the ECLS-B, I examine family stability and its relationship to child well-being. Family stability is consequential for child development and cohabiting families are arguably the most unstable (Bumpass and Lu 2000; Raley and Wildsmith 2004). As expected, children in two biological cohabiting parent families experience the highest levels of family instability; just 70% remain in this family form by re-interview (although 12% continue to reside with both biological parents but the parents have formalized their union by marrying). Once concurrent changes in economic and parenting resources are taken into account, there are few differences by family (in)stability in children's growth in mental and motor development. One exception is that children in stable two biological cohabiting parent families show smaller gains in mental development than their counterparts in two biological married parent families. Two biological cohabiting parent families that are formalized through marriage (i.e., transition to a two biological married parent family) offer no appreciable benefits for children, whose motor and mental development does not differ from their counterparts who remain in stable two biological parent cohabiting families. Moreover, there is compelling evidence that children actually exhibit greater improvements in their mental development when

they move out of a two biological parent family and into a single-mother family (versus remaining in the two biological cohabiting parent family). Both findings are consistent with other research on adolescents that show no benefits of parental marriage (i.e., formalizing a cohabiting stepfamily through marriage) and, for some outcomes, that teens are better off transitioning to a single-mother family than remaining in a cohabiting stepfamily (Brown 2006).

This study has some limitations that merit discussion. First, it is possible that some children were born into a different family structure than that in which they resided at first interview. It is also possible that children experienced family transitions between interviews, which cannot be measured. Hopefully, the very young age of the sample means that few children experienced unmeasured family transitions. The relatively modest number of transitions captured here suggests that the number of unmeasured transitions is likely to be quite small. Therefore, it is arguably reasonable to assume that in most cases, the data provide a complete family structure history. Second, the absence of many significant differences between types of transitions on changes in mental and motor development may be a function of low statistical power given the modest cell sizes for some types of transitions. Subsequent waves of data will yield additional transitions and permit more statistically rigorous analyses of the relationship between family instability and child development. Third, the ECLS-B contains rich data from fathers which is not exploited here, primarily because single-mother families are included. In future analyses, I plan to examine the role of fathers in two biological cohabiting versus married families. Fourth, only two indicators of child development were considered here: mental development and motor development. Additional domains of well-being are worthy of pursuit in future research.

Family stability is related to child development during the first years of life. Children who transition out of two biological parent cohabiting families into single-mother families show greater gains in mental development than children who remain in two biological cohabiting parent families. Ultimately, there appear to be few benefits of parental cohabitation for child development and an extended time in this family form at an early age often slows cognitive growth and language acquisition.

References

- Andreassen, Carol and Philip Fletcher. 2005. Early Childhood Longitudinal Study, Birth Cohort (ECLS-B), Psychometric Characteristics. Volume 1 of the ECLS-B Methodology Report for the Nine-Month Data Collection (NCES 2005-100). U.S. Department of Education. Washington, DC: National Center for Health Statistics.
- Aronson, Stacey Rosenkrantz and Aletha C. Huston. 2004. "The Mother-Infant Relationship in Single, Cohabiting, and Married Families: A Case for Marriage?" *Journal of Family Psychology* 18:5-18.
- Artis, Julie E. 2007. "Maternal Cohabitation and Child Well-being Among Kindergarten Children." *Journal of Marriage and Family* 69:222-236.
- Bradley, Robert H., Robert F. Corwyn, Harriet Pipes McAdoo, and Cynthia Garcia Coll. 2001. "The Home Environments of Children in the United States Part I: Variations by Age, Ethnicity, and Poverty Status." *Child Development* 72:1844-1867.
- Brown, Susan L. 2006. "Family Structure Transitions and Adolescent Well-being." *Demography* 43:447-461.
- Brown, Susan L. 2004. "Family Structure and Child Well-being: The Significance of Parental Cohabitation." *Journal of Marriage and Family* 66:351-367.
- Brown, Susan L. 2002. "Child Well-being in Cohabiting Families." Pp. 173-187 in *Just Living Together: Implications of Cohabitation on Families, Children, and Social Policy*, edited by Alan Booth and Ann C. Crouter. Mahwah, NJ: Lawrence Erlbaum Associates.
- Brown, Susan L. 2000. "The Effect of Union Type on Psychological Well-Being: Depression Among Cohabitors Versus Marrieds." *Journal of Health and Social Behavior* 41:241-55.
- Bumpass, Larry L. and Hsien-Hen Lu. 2000. "Trends in Cohabitation and Implications for Children's Family Contexts in the United States." *Population Studies* 54:29-41.
- Chase-Lansdale, P. Lindsay. 1998. "How Developmental Psychologists Think About Family Process and Child Development in Low Income Families." Paper prepared for the pre-conference, Family Process and Child Development in Low Income Families, Chicago, IL (May).
- Cherlin, Andrew J., Frank F. Furstenberg, Jr., P. Lindsay Chase-Lansdale, Kathleen E. Kiernan, Philip K. Robins, Donna Ruane Morrison, and Julien O. Teitler. 1991. "Longitudinal Studies of Effects of Divorce on Children in Great Britain and the United States." *Science* 252:1386-1389.
- DeKlyen, Michelle, Jeanne Brooks-Gunn, Sara McLanahan, and Jean Knab. 2006. "The Mental Health of Married, Cohabiting, and Non-Coresident Parents with Infants." *American Journal of Public Health* 96:1836-1841.

- DeLeire, Thomas and Ariel Kalil. 2002. "Good Things Come in Threes: Single-Parent Multigenerational Family Structure and Adolescent Development." *Demography* 39:393-413.
- Graefe, Deborah Roempke and Daniel T. Lichter. 1999. "Life Course Transitions of American Children: Parental Cohabitation, Marriage, and Single Motherhood." *Demography* 36:205-17.
- Hao, Lingxin and Guihua Xie. 2002. "The Complexity and Endogeneity of Family Structure in Explaining Children's Misbehavior." *Social Science Research* 31:1-28.
- Hetherington, E. Mavis, Margaret Bridges, and Glendessa M. Insabella. 1998. "What Matters? What Does Not? Five Perspectives on the Association between Marital Transitions and Children's Adjustment." *American Psychologist* 53:167-184.
- Hetherington, E. Mavis and K. M. Jodl. 1994. "Stepfamilies as Settings for Child Development." In A. Booth & J. Dunn (Eds.), *Stepfamilies: Who benefits? Who does not?* (pp. 55-79). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Hill, Martha S., Yeung, W. J., and Greg J. Duncan. 2001. "Childhood Family Structure and Young Adult Behaviors." *Journal of Population Economics* 14:271-299.
- Kennedy, Sheila and Larry L. Bumpass. 2007. "Cohabitation and Children's Living Arrangements: New Estimates from the United States." Paper presented at the annual meeting of the Population Association of America, New York, NY (March).
- Manning, Wendy D. 2002. "The Implications of Cohabitation for Children's Well-being." Pp. 121-152 in *Just Living Together: Implications of Cohabitation on Families, Children, and Social Policy*, edited by Alan Booth and Ann C. Crouter. Mahwah, NJ: Lawrence Erlbaum Associates.
- Manning, Wendy D. and Susan L. Brown. 2006. "Children's Economic Well-being in Married and Cohabiting Parent Families." *Journal of Marriage and Family* 68:345-362.
- Manning, Wendy D. and Kathleen Lamb. 2003. "Adolescent Well-being in Cohabiting, Married, and Single-Parent Families." *Journal of Marriage and Family* 65:876-893.
- Manning, Wendy D., Smock, Pamela J., and Debarun Majumdar. 2004. "The Relative Stability of Cohabiting and Marital Unions for Children." *Population Research and Policy Review* 23:135-159.
- McLanahan, Sara S. and Gary Sandefur. 1994. *Growing Up With a Single Parent: What Hurts, What Helps*. Cambridge, MA: Harvard University Press.

- Raley, R. Kelly and Elizabeth Wildsmith. 2004. "Cohabitation and Children's Family Instability." *Journal of Marriage and Family* 66:210-219.
- Sandefur, Gary D. and Jane Mosley. 1997. "Family Structure, Stability, and the Well-Being of Children." Pp. 328-45 in *Indicators of Child Well-Being*, edited by R. M. Hauser, B. V. Brown, and W. R. Prosser. New York: Russell Sage Foundation.
- U. S. Bureau of the Census. 2001. "2000 Census of Population and Housing, United States." *Profiles of General Demographic Characteristics*.
- Thomson, Elizabeth, Jane Mosley, Thomas L. Hanson, and Sara S. McLanahan. 2001. "Remarriage, Cohabitation, and Changes in Mothering Behavior." *Journal of Marriage and Family* 63:370-380.
- Wu, Lawrence L. 1996. "Effects of Family Instability, Income, and Income Instability on the Risk of a Premarital Birth." *American Sociological Review* 61:386-406.
- Wu, Lawrence L. and Brian C. Martinson. 1993. "Family Structure and the Risk of a Premarital Birth." *American Sociological Review* 58:210-32.
- Wu, Lawrence L. and Elizabeth Thomson. 2001. "Race Differences in Family Experience and Early Sexual Initiation: Dynamic Models of Family Structure and Family Change." *Journal of Marriage and Family* 63:682-696.
- U. S. Bureau of the Census. 2001. "2000 Census of Population and Housing, United States." *Profiles of General Demographic Characteristics*.

Table 1. The Distribution of Children by Family Structure at Baseline (9-mo interview)

Family Structure	Weighted %
<i>Two Biological Parent Family</i>	
Two Biological Cohabiting Parents	13.79
Two Biological Married Parents	64.94
<i>Single-Mother Family</i>	
	19.68
<i>Stepfamily</i>	
Cohabiting Stepfamily	0.73
Married Stepfamily	0.87
<i>Total</i>	100.00

Unweighted N=10,100.

Table 2. Cross-tabulation of Family Structure at 9 and 24 months (cell, row, and column percentages shown)

Family Structure at 9 months	Family Structure at 24 months					Total
	Two Biological Cohabiting	Two Biological Married	Single-Mother	Cohabiting Stepfamily	Married Stepfamily	
Two Biological Cohabiting	9.3% 70.6 84.6	1.5% 11.7 2.3	2.3% 17.7 12.1	0	0	13.2%
Two Biological Married	0	64.1% 98.3 96.1	1.1% 1.7 5.8	0	0	65.2%
Single-Mother	1.7% 8.4 15.4	1.0% 5.4 1.6	15.7% 77.7 80.8	1.1% 5.4 72.0	0.6% 3.0 49.1	20.1%
Cohabiting Stepfamily	0	0	0.16% 21.9 0.8	0.4% 57.8 28.0	0.1% 20.0 12.0	0.7%
Married Stepfamily	0	0	0.2% 27.6 0.95	0	4.8% 72.4 38.9	0.7%
Total	11.0%	66.7%	19.4%	1.5%	1.2%	100%

Note: N=8,700.

(Percentages may not always add to 100 due to rounding errors).

Table 3. Models Predicting the BSF-R Mental Scale Score at 24 Month Interview (N=8,500)

	Model 1	Model 2	Model 3	Model 4	Model 5
Wave 1 Value of DV	0.22***	0.16***	0.16***	0.16***	0.16***
<i>Family Structure</i>					
TwoBioCoh - TwoBioMar	-2.81** [#]	-1.49 [†]	-0.89	-1.50 [†]	-0.91
TwoBioCoh - SingleMom	-1.85 [†] ^{\$}	0.18 ^{\$}	0.51 ^{\$}	0.34 ^{\$}	0.65 ^{\$}
TwoBioMar - SingleMon	-1.30	-1.30	-0.78	-0.93	-0.45
SingleMom -TwoParent	-2.03**	-0.36	0.12	-0.25	0.18
Stable Single Mother ^a	-4.04***	-1.16*	-0.68	-1.01*	-0.57
Stable Two Bio Coh ^a	-4.75*** [#] ^{\$}	-2.00*** ^{\$}	-1.38* ^{\$}	-1.86*** ^{\$}	-1.28* ^{\$}
<i>Child & Maternal Characteristics</i>					
Child's Age		1.63***	1.67***	1.63***	1.66***
Boy ^b		-3.47***	-3.47***	-3.40***	-3.41***
NH Black ^c		-4.11***	-3.64***	-3.97***	-3.54***
Hispanic ^c		-5.95***	-4.83***	-5.87***	-4.82***
NH Other ^c		-3.07***	-2.96***	-2.99***	-2.92***
Age20 ^d		-0.24	1.37*	-0.10	1.46*
Age20_24 ^d		-0.40	0.82	-0.35	0.84
Age25_29 ^d		-0.46	0.19	-0.39	0.25
Age30_34 ^d		0.79 [†]	0.94*	0.82 [†]	0.96*
Smoked		-1.65***	-0.87*	-1.57***	-0.85*
Drank		1.46 [†]	1.15	1.48 [†]	1.17
Never Breastfed ^e		-3.35***	-2.60***	-3.40***	-2.68***
Previously Breastfed ^e		-1.98***	-1.78***	-1.97***	-1.78***
Normal Birth Weight		3.85***	3.86***	3.84***	3.86***
<i>Economic Resources</i>					
Increased LFP ^f			0.01		-0.04
Decreased LFP ^f			0.23		0.24
< High School ^g			-0.98*		-0.94*
Some College ^g			1.13*		1.12*
College ^g			3.64***		3.561***
ΔFamily Income			0.01		0.01
<i>Parenting Behaviors</i>					
ΔResponsiveness				0.53***	0.53***
More Difficult to Raise ^h				-0.89*	-0.86*
Less Difficult to Raise ^h				0.45	0.47
ΔLiterary Activities				0.19**	0.19**
CES-D Scale				-0.06*	-0.04
Missing CES-D Scale				-1.14*	-0.79
Constant	111.77***	78.06***	74.74***	78.37***	75.09***
R ²	0.07	0.20	0.22	0.21	0.23

Source: ECLS-B 9 month interview. Standard errors were corrected for the complex sampling design. Reference categories: ^aStable Two Biological Married, ^bGirl, ^cNH White, ^dAge35+, ^eCurrently Breastfed, ^fNo Change in Labor Force Participation, ^gHigh School Degree, ^hSame Difficulty to Raise

[#] and ^{\$} superscripts indicate coefficients are significantly different, $p < .10$

[†] $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$.

Table 4. Models Predicting the BSF-R Motor Scale Score at 24 Month Interview (N=8,500)

	Model 1	Model 2	Model 3	Model 4	Model 5
Wave 1 Value of DV	0.09***	0.06***	0.06***	0.06***	0.06***
<i>Family Structure</i>					
TwoBioCoh - TwoBioMar	-0.48	-0.35	-0.26	-0.34	-0.25
TwoBioCoh - SingleMom	-0.09	-0.33	-0.29	-0.27	-0.24
TwoBioMar - SingleMon	-0.07	-0.63	-0.58	-0.50	-0.46
SingleMom -TwoParent	0.43	0.20	0.26	0.24	0.30
Stable Single Mother ^a	-0.38	-0.58*	-0.53*	-0.53†	-0.48†
Stable Two Bio Coh ^a	-0.71**	-0.55*	-0.47†	-0.50†	-0.43
<i>Child & Maternal Characteristics</i>					
Child's Age		0.84***	0.84***	0.83***	0.84***
Boy ^b		-0.76***	-0.76***	-0.74***	-0.74***
NH Black ^c		0.85**	0.92***	0.89***	0.96***
Hispanic ^c		-0.57**	-0.41†	-0.56**	-0.41†
NH Other ^c		-0.35	-0.33	-0.33	-0.31
Age20 ^d		0.02	0.21	0.06	0.25
Age20_24 ^d		0.24	0.38	0.25	0.39
Age25_29 ^d		0.06	0.14	0.07	0.15
Age30_34 ^d		0.29	0.31†	0.29	0.31
Smoked		-0.47*	-0.36†	-0.44*	-0.35†
Drank		0.08	0.04	0.08	0.04
Never Breastfed ^e		-0.17	-0.07	-0.19	-0.10
Previously Breastfed ^e		-0.01	0.02	-0.01	0.02
Normal Birth Weight		2.10***	2.11***	2.10***	2.11***
<i>Economic Resources</i>					
Increased LFP ^f			0.24		0.22
Decreased LFP ^f			-0.13		-0.13
< High School ^g			-0.27		-0.27
Some College ^g			-0.05		-0.05
College ^g			0.39		0.36
ΔFamily Income			0.00		-0.00
<i>Parenting Behaviors</i>					
ΔResponsiveness				0.20**	0.20**
More Difficult to Raise ^h				-0.22	-0.21
Less Difficult to Raise ^h				0.17	0.16
ΔLiterary Activities				0.07†	0.07†
CES-D Scale				-0.02	-0.02
Missing CES-D Scale				-0.21	-0.17
Constant	76.76***	56.31***	55.96***	56.41***	56.06***
R ²	0.03	0.09	0.09	0.09	0.09

Source: ECLS-B 9 month interview. Standard errors were corrected for the complex sampling design. Reference categories: ^aStable Two Biological Married, ^bGirl, ^cNH White, ^dAge35+, ^eCurrently Breastfed, ^fNo Change in Labor Force Participation, ^gHigh School Degree, ^hSame Difficulty to Raise

†p < .10, *p < .05, **p < .01, ***p < .001.