Published in final edited form as:

Ann Am Acad Pol Soc Sci. 2014 July 1; 654(1): 48–65. doi:10.1177/0002716214524515.

Family Complexity among Children in the United States

WENDY D. MANNING, SUSAN L. BROWN, and J. BART STYKES

Abstract

Researchers largely have relied on a measure of family structure to describe children's living arrangements, but this approach captures only the child's relationship to the parent(s), ignoring the presence and composition of siblings. We develop a measure of family complexity that merges family structure and sibling composition to distinguish between simple two-biological-parent families, families with complex-sibling (half or stepsiblings) arrangements, and complex-parent (stepparent, single-parent) families. Using the Survey of Income and Program Participation (SIPP), we provide a descriptive profile of changes in children's living arrangements over a 13-year span (1996–2009). SIPP sample sizes are sufficiently large to permit an evaluation of changes in the distribution of children in various (married, cohabiting, and single-parent) simple and complex families according to race/ethnicity and parental education. The article concludes by showing that we have reached a plateau in family complexity and that complexity is concentrated among the most disadvantaged families.

Keywords

family complexity; children's living arrangements; family structure; measurement

Researchers and policy-makers who study the family experiences of children often rely on an indicator called “family structure,” which encapsulates the biological relationship of parents to a child along with the marital or union status of parents. Yet family life is predicated on more than just family structure, or relationships between the child and parents. Families also include siblings. Relying solely on family structure excludes sibling composition, which describes the relationships of children to one another (Bjorklund, Ginther, and Sundstrom 2007; Cancian, Meyer, and Cook 2011; Gennetian 2005; Stewart 2005). Building on prior work, we demonstrate an innovative way of conceptualizing and categorizing families that joins family structure and sibling composition into a unitary family complexity measure.

This conceptualization of “simple two-biological” and “complex” families may best be illustrated with an example. By definition, the traditional American nuclear family consists of a married mother and father who are both biologically related to all of the children in the family. The underlying assumption is that the nuclear family consists of only full siblings. Even though a child is living with two biological parents who are married to one another, there may be other siblings in the household who are not biologically related to both parents (half- and stepsiblings). In this case, combining family structure and sibling composition indicates that the child living with two biological, married parents and either a half- or stepsibling is not living in a simple married family but rather a complex family. Thus, to

capture simple or complex family experiences, it is critical to assess both the family structure and sibling composition of the focal child (Bjorkland, Ginther, and Sundstrom 2007; Gennetian 2005; Halpern-Meekin and Tach 2008).

This article examines the patterns and trends in family complexity among children between 1996 and 2009, using data from the Survey of Income and Program Participation (SIPP). The SIPP provides an untapped opportunity to generate an in-depth portrait of the complexity of children's living arrangements, spanning more than a decade. To date, no other data are available that provide a nationally representative descriptive profile of family complexity among children prior to 2007. We conclude with a discussion of ways to capture the complex family experiences of children as well as reflect on policy considerations.

Background

Family complexity in this article refers to the confluence of two key concepts: family structure (parental relationships to children and one another) and sibling composition (half, step, and full siblings). Our work focuses on the child's view of complexity and reflects complexity in his or her home (residential complexity). This approach cannot account for siblings who live outside the home (e.g., older siblings or children of nonresident parents). Here, we classify children living in complex families as those who reside with a single parent, stepparent (cohabiting or married), half sibling, or stepsibling. This indicator accounts for the parent-child relationship as well as child-child relationships. In other words, complex families are families where a child's biological parents do not reside together, they may or may not have repartnered (forming step or blended families), and/or siblings are present who do not share the same parents. Simple two-biological-parent families (cohabiting or married) are families where all members are biologically related to all other members of the family, with only biological parents and full siblings residing together.

We extend beyond some prior studies by explicitly treating cohabitation as a two-parent family form. It is essential to consider parental union status (rather than marital status), as 40 percent of children spend some time in a cohabiting-parent family (Kennedy and Bumpass 2008). Consistent with recent work, we include cohabiting partners as members of the family (Bumpass, Raley, and Sweet 1995; Stewart 2007). Cohabiting partners may not be biologically related to all children, which results in cohabiting stepfamilies. While cohabitation is often considered a family type, many studies do not distinguish between cohabiting biological-versus stepparent families. About half of children living with cohabiting parents are residing with two biological parents and half with a step-parent (Kennedy and Fitch 2012). No prior research on sibling complexity has adequately considered cohabitation (two-biological and stepfamilies). These studies either omit separate consideration of cohabiting families (e.g., Halpern-Meekin and Tach 2008; Hofferth 2006) or combine cohabiting parents with married parents (e.g., Bjorklund, Ginther, and Sundstrom 2007; Gennetian 2005). Further, most prior research on stepfamilies has been limited to married step-families with no attention to cohabiting stepfamilies (Stewart 2007).

The measurement and conceptual challenges posed by complex family forms are not new. There is extensive research on the ambiguities surrounding married stepfamilies, which

Cherlin (1978) characterized as “incomplete institutions” because the norms and expectations involved in this family type are not clearly defined. Stepfamilies require individual members to create kinship ties and establish among themselves their responsibilities and obligations to one another. The recent rise in cohabitation provides an additional layer of ambiguity, as cohabiting stepfamilies cannot rely on either marital roles or biological ties to define family membership and responsibilities (Brown and Manning 2009; Stewart 2005).

Growth in family complexity is expected due to changes over the last 50 years in union formation and instability, along with rises in the number and types of family transitions. For example, with high rates of nonmarital fertility (40 percent of children are born outside of marriage), growth in cohabitation (60 percent of young adults having ever cohabited), delays in the timing of marriage (median age at marriage is 27 for women and 28.7 for men), stable high rates of divorce (40 percent of first marriages end in divorce), and high levels of repartnering and multiple-partner fertility, the family lives of children and adults have become increasingly complicated (Carlson and Furstenberg 2006; Kennedy and Bumpass 2011; Kreider and Ellis 2011; Manning 2010; Ventura 2009; Raley and Bumpass 2003; Stewart 2007; U.S. Census Bureau 2012). Our estimates of family complexity among children reflect all of these family changes, but focus on recent shifts (since 1996).

The changing patterns of family formation and stability mean more attention needs to be given to the measurement of children’s family relationships, instead of focusing narrowly on the parent-child relationship, or family structure. Research on how the family influences children’s well-being must not only account for current family circumstances (e.g., cohabiting stepfamilies, multiple partner fertility) but also address the relationships among family members, including siblings. While we are not the first to conceptualize this type of complexity (e.g., Bjorklund, Ginther, and Sundstrom 2007; Gennetian 2005; Hofferth 2006), only the SIPP permits nationally representative assessments of trends in this type of family complexity.

Measurement of children’s living arrangements: Family structure

Our understanding of children’s family circumstances depends on how families are measured, which varies to some extent by the research question (e.g., how do children with married two-biological parents fare versus other family types). The traditional focus has been on family structure and has included several components: number of parents, biological relationship of parents to children, and marital and union status of parents.

Historically, family structure has been based on the number of parents present in the household (two, one, or none). Sometimes this has been consolidated into “intact” and “nonintact” families, signifying two parents versus one or no parent, respectively. The intact label is usually inaccurate because it implies a stable two-biological-parent family, but relies only on an indicator of number of parents. Family structure based on number of parents is oversimplified and ignores variation in children’s living arrangements.

Another key indicator of children’s family structure is the marital and union status of the parents. Marriage confers certain legal and social supports for children and parents that are

important in assessments of child well-being (e.g., Brown 2010). It is often presumed that children with unmarried parent families are in single-parent families, but a substantial share live with a parent and his or her cohabiting partner (or even two parents who are cohabiting). In 2009, 21 percent of children living in unmarried parent families (cohabiting or single) were living with a cohabiting parent family (cohabiting biological parents or cohabiting stepparents) (Kreider and Ellis 2011). Children in cohabiting parent families tend not to fare as well as those raised by married parents (Brown 2006, 2004; Raley, Frisco, and Wildsmith 2005). Thus, incorporating cohabitation status contextualizes the number of parents in the family.

Measures of children's family experiences are typically expanded to include the biological relationship of the adult being interviewed to children living in the household. The biological distinction divides two-parent families into those that are two biological parents versus one biological parent and one stepparent families. Children raised with a stepparent typically experience more negative outcomes than children raised by two biological parents but exhibit comparable outcomes as children raised by single parents (Brown 2010).

Overlaying biological status and union status has implications for child well-being. Children raised by cohabiting two biological parents do not fare as well as those raised by married two biological parents (Artis 2007; Brown 2004), but children living with cohabiting and married stepparents share similar outcomes (DeLeire and Kalil 2005; Manning and Lamb 2003; Manning and Brown 2006; Sweeney 2007). Three-tenths (29 percent) of children living with a stepparent reside with a cohabiting parent, not a married parent, whereas 5.5 percent of children living with two biological parents are living with a cohabiting parent (Kreider and Ellis 2011). About half of children with cohabiting parents lived with two biological parents and the other half with a stepparent (Kennedy and Fitch 2012).

Data constraints make precisely measuring family structure a challenge. The indicator of the number of parents and marital status of parents can be gleaned from household rosters or relatively simple questions. The inclusion of cohabitation requires data sources that have a response category for a cohabiting partner on household rosters or ask direct questions about parental cohabitation. Starting in 1995, most federal data sources and surveys included information about cohabiting partnerships. However, data that focus on just a household roster miss cohabiting "subfamilies" or families doubling up because cohabiting partners who are not a partner to the household head are categorized as "nonrelatives" while spouses are categorized as "in-laws." Starting in 2007, the Current Population Survey (CPS) included a cohabiting partner pointer (based on a question identifying cohabiting partnerships) so cohabiting families can be identified regardless of headship status (see Kennedy and Fitch 2012). They find 18 percent of cohabiting relationships are in subfamilies and thus are missed by the traditional household head approach.

The assessment of biological relationships between parents and children is often based on the household roster that determines how members are related to the household "head." The shortcoming is that this does not determine how the head's partner or spouse is related to each child in the household. For instance, a child may be biologically related to the head but be a stepchild to the partner. This relationship cannot be discerned from the traditional

household roster. Recent data (such as the 2007 CPS) have made innovative use of parental pointers (Kennedy and Fitch 2012; Kreider 2008), which allow scholars to identify the parents (biological, adoptive, or step) of each child. The SIPP employs both parental pointers and another approach—household relationship matrices—that determine how each person in a household is related to others (rather than simply his or her relationship to the household head). Direct questions about the biological relationships of adults to children have been included in surveys but often take much valuable survey space and time. Thus, the only nationally representative datasets that currently allow refined indicators of children's living arrangements and relationships to other household members are the SIPP and CPS (Kreider 2008).

Measuring children's living arrangements: Siblings

Siblings are a central component of family life. Over three-quarters (78 percent) of children live with siblings, and over one-third (36 percent) live with siblings who do not share the same biological parents (Kreider and Ellis 2011). Sibling composition is important because there is growing evidence that children raised with half or stepsiblings often experience worse outcomes, such as school achievement, depression, and delinquency, than those raised with only full siblings (Ginther and Pollak 2004; Halpern-Meekin and Tach 2008; Hofferth 2006; Tillman 2008; Yuan 2009). Research on father involvement has considered sibling complexity (e.g., Hofferth and Anderson 2003; Hofferth 2006). For instance, being in a blended family (at least one shared and one stepchild) was associated with lower levels of father involvement for biological children; however, fathers reported higher involvement with stepchildren who lived in blended families (Hofferth and Anderson 2003). In contrast to most research that documents negative effects of sibling complexity, Hofferth (2006) found children with sibling complexity in married families reported fewer behavior problems, which she suggested was likely due to positive selection of parents into married blended families.

Our understanding of patterns of sibling composition is limited because these studies have drawn on specialized data. For example, Halpern-Meekin and Tach (2008) rely on sibling samples within Add Health. Other work has focused on specific subgroups, such as children born to Wisconsin unmarried mothers (Cancian, Meyer, and Cook 2011) or unmarried mothers in urban areas (Carlson and Furstenberg 2006). Research relying on the Panel Study of Income Dynamics (PSID) has been limited by small cell sizes (Hofferth and Anderson 2003; Hofferth 2006). Often research is limited to just one age group—adolescents in school in the Add Health (Guzzo and Furstenberg 2007a; Tillman 2008; Yuan 2009), young children 0 to 12 years old in the PSID (Hofferth and Anderson 2003; Hofferth 2006), or young school age children (5–10 years old) in the NLSY79 (National Longitudinal Surveys)—preventing a comprehensive assessment of sibling complexity. Some analyses of earlier datasets provide a comprehensive profile but do not reflect the contemporary climate. Thus, we cannot rely on previous studies to provide assessments of trends or composition in all children's complex family experiences.

Attention to multiple-partner fertility (MPF), or having children with more than one partner, has fostered greater attention to the sibling composition of families. Certainly, MPF is an

important form of family complexity, but it does not encapsulate all forms of family complexity, for example, stepsiblings (Sweeney 2010). Guzzo (this volume) has an extensive discussion of levels and implications of MPF. The estimates vary, but it appears that about 17 percent of fathers and 22 percent of mothers in their 20s and 30s experienced MPF (Guzzo, this volume), as did 23 percent of fathers and 28 percent of mothers in their 40s with two or more children (Dorius 2011). Prior work has focused on the parent's perspective, but to date few studies have introduced a child's perspective. We present the percentage of children residing in an MPF family (living with half siblings). Following the MPF literature, we present these levels for all children as well as those living with siblings. Our estimates will not mirror those of parents because they exclude nonresident siblings or siblings who have formed their own, separate households, but nonetheless, they provide an insight into children's living circumstances.

Family complexity: Measuring patterns and change

Our measure of family complexity captures the intersection of family structure and the sibling composition of families, distinguishing among simple two-biological, complex parent, and complex sibling families. Simple two-biological families are families in which all children and parents are biologically related to one another, coreside together, and all children in the household share the same family structure. Examples of simple biological families are married biological parent families with only full siblings and cohabiting biological parents with only full siblings. Complex parent families are families where one biological parent of at least one child lives outside the home, and the resident parent has either remained single or repartnered. Complex sibling families consist of any family structure where half or stepsiblings are present. Thus, children living with a single mother and half siblings are complex, as are stepfamilies that include a stepparent, stepsibling, or half sibling. By incorporating the union status of the parents, we generate five types of family structures: married biological, cohabiting biological, married step, cohabiting step, and single-parent families. Given that the theoretical focus of research on children is typically on the family (composition, environment, and resources), we argue that the intersection of sibling composition and family structure is critical to the measurement and conceptualization of family type. This approach to family complexity merges the parent-child (i.e., family structure) and sibling relationships into one family-wide measure.

Data

We draw on the SIPP, a nationally representative panel study that provides information about both individuals and households (U.S. Census Bureau 2006). The earliest SIPP panel was collected in 1984; however, considerable changes to the sampling strategy, research design, and questionnaire were implemented in 1996, and thus our analyses were limited to the 1996 and 2008 SIPP panels.

The SIPP is the only nationally representative dataset that allows for assessment of change over time along with the construction of complex measures of family structure that encompass sibling composition. We employ the parental pointers and relationship matrices to identify children's relationships to parents and siblings. In the detailed relationship matrices, the primary respondent identifies the relationships of each member of the

household to one another, which permits the identification of relationships among all children and adults within a household, which is not possible with traditional household rosters. The SIPP household relationship matrix is superior to standard household survey questions that indicate only the relationship of a child to a head of household (Brandon 2007; Kennedy and Fitch 2012). Additional analyses indicate this is important because 11 percent of children live in households where their parent is not the head of household. The SIPP panels surveyed at least 40,000 households at each wave, providing a large enough sample to fully consider levels of family complexity by family structure.

The household relationship matrix, which was required to establish sibling composition, was only collected for the fourth reference month of the wave 2 topical module for the 1996 and 2008 SIPP panels. In response, we followed the SIPP users' guide procedures to link the wave 2 topical module data with the core wave 2 data. Linking the data yielded 91,214 individuals in the 1996 panel and 98,504 in 2008 panel. Next, we limited the analytic sample to minor children (under age 18), which yielded 25,841 (1996 panel) and 25,197 individuals (2008 panel). We limited our indicators to children living with at least one biological parent (24,578 and 23,985 children for 1996 and 2008 panels, respectively), about 4 percent of children did not reside with a biological parent in both 1996 and 2009. Since wave 2 of the 2008 panel was collected in 2009, results from this panel are representative of children's family structure in 2009 rather than 2008.

Children's living arrangements

The indicator of children's living arrangements consists of two components: parent complexity and sibling complexity. *Parent complexity* was based on the family structure of children, drawing on the number of parents, biological ties of parents to children, and legal ties between parents. A combination of the parental pointers (which identified who each child's parent was and the relationship between that parent and the child) and relationship matrix was used to distinguish between children who lived with two married biological/adoptive parents, two cohabiting biological/adopted parents, one married biological/adoptive and one stepparent (married stepparent), one cohabiting biological/adoptive and one stepparent, or single parent (mothers and fathers were combined). Initially the parental pointers placed children who lived with a partnered mother/father who did not label that partner a parent as living with a single parent. We used information from the detailed relationship matrices for these children and coded them as living with a stepparent because their resident, biological parent lived with a partner. Ultimately family structure was coded into five mutually exclusive, exhaustive families: married biological, cohabiting biological, married step, cohabiting step, and single parent. Our estimates are similar to those in the CPS (Kennedy and Fitch 2012). Based on this indicator, we considered children who lived in a married step, cohabiting step, or a single-parent family as experiencing parent complexity because these children lived away from one biological parent. Children living with two biological parents (cohabiting or married) reported no parent complexity at the time of interview. This measure is static, capturing the experiences at the time of interview, and it is certainly possible that children living in two-biological-parent families may subsequently experience parental separation.

Next, we employed the relationship matrices to identify sibling relationships: no siblings, full siblings, stepsiblings, and half siblings. *Sibling complexity* was coded as a dummy indicator that flagged children who lived with at least one half or stepsibling as “1” whereas children with no siblings and those who lived with only biological siblings were coded as “0.” In other words, children were classified as living with sibling(s) who did not share their parents and sibling(s) who had shared parents. The estimates we obtain are similar to those reported using the CPS (Kennedy and Fitch 2012).

Our discussion of family complexity considers the intersection between parent and sibling complexity. The summary indicator classified children into four categories: (1) simple two biological parents (neither parent nor sibling complexity); (2) sibling, but not parent, complexity; (3) parent, but not sibling, complexity; and (4) both sibling and parent complexity. We present results that provide the detailed categorization of family structure and sibling complexity as well as a summary indicator.

Social structure

We focus on two indicators of social structure that are associated with children’s living arrangements: child’s race/ethnicity and social class (parental education). Child’s race/ethnicity was coded into four mutually exclusive, exhaustive categories: non-Hispanic white (white); non-Hispanic black (black); Hispanic; and non-Hispanic other, including multiracial (other). We relied on a limited categorization of race/ethnicity given our emphasis on detailed family structure and differences in the 1996 and 2008 SIPP panels. Parental education was used as a rough proxy for social class. We coded parental education into two categories: at least one parent earned a bachelor’s degree or higher, and neither parent had a bachelor’s degree. We also considered a three-category indicator for parental education (college education, high school graduate, and less than high school degree), but found the more parsimonious indicator that distinguished between children who had a parent with a college degree and those who did not adequately depicted differences across parental education.

Results

Trends in family complexity

The first set of findings focus on the summary indicator of children’s living arrangements that captures family complexity for 1996 and 2009 (Table 1). The share of children living in simple two-biological-parent families (no sibling or parent complexity) declined from 62.7 percent in 1996 to 59.2 percent in 2009. Thus, the majority of children who lived with at least one parent lived with both two biological parents and either no or only full siblings. Consideration of union status indicates that 61.1 percent of children in 1996 lived in simple two-biological-married-parent families, and in 2009 it was 56.2 percent. The share of children living in simple two-biological-cohabiting parent families nearly doubled from 1.6 percent in 1996 to 3.0 percent in 2009. Thus, a small change has occurred in the share of children living in families with no complexity.

Children experiencing only sibling complexity live with two biological parents, but all children in the family do not share the same biological parents. There has been almost no change in the share of children experiencing only sibling complexity, 5.4 percent in 1996 and 5.2 percent in 2009. At both time points, about 8 percent (in 2009, 5.2%/[5.2% + 59.2%]) of children living with two biological parents lived with a sibling who did not share the same parents. Thus, one in twelve children living with two biological parents had a sibling from a different set of parents.

There has been a small increase in the share of children experiencing only parent complexity, meaning they live with only one biological parent and full (or no) siblings. In 1996, one-quarter (25.1 percent) of children lived with only one biological parent and full siblings and in 2009 28.5 percent of children lived with one biological parent and full siblings. The majority of these children are living with a single mother and full siblings and the remainder are in stepfamilies (cohabiting or married).

Similar shares of children were experiencing both parent and sibling complexity: 6.8 percent in 1996 and 7.1 percent in 2009. Thus, one in fourteen children in 2009 faces two forms of family complexity, because they live with only one biological parent as well as at least one half or stepsibling. There were small increases in the share of children living in married and cohabiting stepparent families with sibling complexity that were offset by declines in the share of children living with a single mother and children from more than one parent. We show that most children living with stepparents also live with step or half siblings. About half of children in married stepfamilies and 28 percent in cohabiting step-families experienced sibling complexity.

The sibling complexity indicator combines multiple sibling configurations. Table 2 shows the specifics for 1996 and 2009. There are virtually no changes in sibling composition over the 13-year time frame. In 2009, 20 percent have no siblings, 67.6 percent have only biological siblings, 11.1 percent have at least one half sibling, and 1.2 percent have a stepsibling but no half sibling. Among children who have a sibling in 2009, 84.6 percent have only a full biological sibling, 13.9 percent lived with at least one half sibling, and 1.5 percent lived with a stepsibling but no half siblings. The vast majority of sibling complexity stemmed from living with a half sibling.

To use the terminology of MPF (parent who has children from more than one mother/father), in 1996 and 2009, 11.1 percent of children lived with a parent who had a resident child with another partner. The MPF literature often limits analyses to parents who have at least two children (at risk of having MPF). In both 1996 and 2009 approximately 14 percent of children with siblings lived with a parent who had MPF. This estimate is conservative, as it excludes children who have parents with nonresident children from a different partner or parents with adult children from another partner.

Race/ethnicity

Turning now to racial/ethnic variation in simple and complex families, we find differential patterns across groups (Table 3). In 1996, 69.2 percent of white, 29.9 percent of black, and 62.1 percent of Hispanic children resided in simple two-biological-parent families. The

figures were largely comparable for 2009, with 66.4 percent of white, 28.3 percent of black, and 56.8 percent of Hispanic children living in simple two-biological-parent families. Hispanics experienced the largest increase in family complexity during the time period.

The difference in the percentage of children who lived with only parent complexity in 2009 was quite large, with 22 percent among white, 57.8 percent among black, and 29.3 percent among Hispanic children. In contrast, the differentials in sibling complexity only were quite modest. Overall, 11.6 percent of white, 13.9 percent of black, and 13.9 percent of Hispanic children experienced any sibling complexity, that is, lived with children who did not share the same parents. Taken together, sibling complexity constitutes a greater share of family complexity among white and Hispanic children than among black children.

Parental education level

Table 4 presents the distribution of children across family complexity according to parental education. There are only slight increases over time in the share of children living in complex families within each education group. The striking differential according to education is the level of complex family living. In 1996, 82.2 percent of children with a college-educated parent lived in a simple two-biological-parent family, and in 2009 78.8 percent did so. The shift among children who had modestly educated parents was modest from 57.9 percent living in simple two-biological-parent families to 51.7 percent in 2009. Thus, family complexity is twice as common among children with modestly educated parents (48.3 percent) than among those with a college degree (21.2 percent).

In terms of specific forms of complexity, in 2009, 2.7 percent of children with a highly educated parent resided in a family with only sibling complexity, 15.6 percent experienced only parent complexity, and 2.9 percent lived with both parent and sibling complexity. In contrast, 6 percent of children with a modestly educated parent lived with only sibling complexity, one-third (33.5 percent) parent complexity, and 8.8 percent experienced both sibling and parent complexity. The parental education differentials in family complexity were sharp.

Discussion

Bringing together prior research on children's family structure and sibling composition, we capture the intersection of the parent-child and sibling relationships (family complexity). We explicitly distinguish parent complexity (children who do not live with both biological parents) and sibling complexity (some of the siblings do not share the same parents). While many researchers discuss the importance of the confluence of parent and sibling complexity (Bjorklund, Ginther, and Sundstrom 2007; Cancian, Meyer, and Cook 2011; Gennetian 2005; Stewart 2005), to date no research has provided a descriptive profile that covers over a decade.

Using the only nationally representative data available to assess the trend in family complexity—the 1996 and 2009 SIPP panels—we find that there have not been dramatic shifts in children's living arrangements over this 13-year time frame. Our findings align with results from other datasets (U.S. Census, CPS). For example, CPS data indicated almost no

change in the share of children living with single parents from 27 to 26 percent between 1996 and 2009. Even our refined estimates suggested relatively little change in children's living arrangements. For example, we found modest declines in simple two-married-parent families (61.1 to 56.2 percent) and slight increases in complex two-parent families (13.1 to 15.2 percent). The share of children in cohabiting parent families has shown larger growth, from 3.9 to 6.8 percent between 1996 and 2009. Sibling complexity remained unchanged at about 12 percent. Taken together, our results, indicating little change since the mid-1990s, are consistent with research on family instability (Kennedy and Bumpass 2011; Musick and Micheltore 2012) and work documenting MPF (Guzzo and Furstenberg 2007b; Guzzo, this volume). Although there have been dramatic changes in American family life over the last 50 years, American families have likely now reached a plateau in complexity.

Although overall levels of family complexity only modestly increased since 1996, there are notable variations by subgroup. For example, Hispanic children experienced the greatest decline in simple two-biological-parent families and a slight increase in sibling complexity. Also, Hispanic children had the highest levels of sibling complexity, but the racial gap in sibling complexity was not large. While black children continue to have the highest levels of family complexity, most of their complexity stems from single-parent families. White and Hispanic children's family complexity was split evenly between repartnering and single-parent families.

Our findings indicate that children with college-educated parents were distinctive compared with children whose parents were moderately educated. Just 21 percent of children of highly educated parents were in complex families, whereas roughly half of those whose parents had lower levels of education were in complex families. Sibling complexity was over twice as high for children without a college-educated parent: 5.7 and 14.8 percent, respectively. Family complexity is most concentrated among the disadvantaged.

While families are embedded in households, our indicators of family complexity introduced just family and not household complexity. Most research on children has emphasized the family, ignoring household characteristics or treating household composition as a separate construct. About 10 percent of children experienced some form of household complexity (e.g., aunts, cousins, or nonrelatives). A key task for future research is to more fully develop and test measures that combine both children's family and household composition and evaluate how such measures are related to child outcomes.

Our indicator of family complexity provides a counterpoint to a parent-based indicator of MPF, parents who have children with more than one partner (Guzzo, this volume). Certainly MPF has existed for some time as parents break up and form new relationships and have additional children. MPF alone, as an indicator of family complexity, focuses on biological parenthood ties (that may extend across households) and does not account for stepparents (social parents) or step-siblings. We found that 11 percent of children were living with half siblings, by definition at least one of their parents has had multiple-partner fertility. Yet two-thirds of children living with stepparents or stepsiblings were not living in an MPF context. Thus, MPF is a parent-centered indicator that captures only one type of family complexity that children experience.

Prior work has demonstrated that family complexity is associated negatively with indicators of academic and educational outcomes (e.g., Gennetian 2005; Ginther and Pollak 2004; Tillman 2008), depressive symptoms and delinquency (Halpern-Meekin and Tach 2008), and economic well-being (Brown, Manning, and Stykes 2013). These studies show that family complexity has a unique influence on child well-being beyond the traditional family structure indicators. Our indicator focuses on some forms of complexity ignored in prior work—cohabitation as well as dual levels of complexity, parents, and children. Future research should investigate specifically how family complexity is linked to other indicators of child well-being, using a wider range of data sources to assess its utility compared with more traditional measures of family structure.

Even though our work provides new insights into family complexity, there are a few shortcomings. First, we do not account for the gender composition of the parents. Prior work presumes two-parent families are composed of two different-sex parents. However, about 16 percent of same-sex couples include children (Gates 2011). As opportunities for same-sex parents to have and raise children have expanded, this family structure should be captured in future work. Certainly, the legalization of same-sex marriage in a growing number of states introduces the need to distinguish between same-sex married and cohabiting families.

Second, we provide a static snapshot of children's experiences (at two points in time). The high levels of parental instability and repartnering indicate that children are likely to experience many types of families during the course of their lives. The new SIPP data collection will permit analyses of change in children's living circumstances. Some repartnerings may be positive in terms of social and economic resources while others can be costly to the child. A stable, never-married-single-mother family may have different implications for child well-being than a single-parent family that is the result of a parental divorce or a series of cohabiting relationships. An advantage of the measure of sibling complexity is that it is an indicator of prior relationship instability (not necessarily coresidential unions) that might not be captured with traditional measures of cohabitation or marriage. Further, sibling complexity means there could be ties between former partners (biological parents across households), which may be a source of strain or support for children.

Third, we move beyond prior studies by determining how all members are related to one another and not just relying on the relationships all members have to the head of household. A challenge remains to determine children's and parent's perspectives of family membership (Brown and Manning 2009; Stewart 2005). The definitions of sibling relationships are likely quite distinct based on whether a parent or child is the respondent.

Finally, nearly all assessments of children's living arrangements are limited to full-time members of the family. However, families have become more fluid with children and adults moving across household boundaries and potentially being members of several households (Seltzer 2000). Increasing attention to the fluid membership of families and households may be important for more complete assessments of well-being. Our work is restricted to residential family complexity and does not include other children who live outside the home (such as older siblings or siblings who live with nonresident parents). Our lens on family

complexity is focused on children's coresidential experiences, which may be the most proximal indicators of well-being.

Our results join the call to reconsider conventional measurement approaches to family structure by attending not only to children's relationships to parents but also to siblings, which ultimately provides a richer, more nuanced picture of the family environment that is shaping children's development. Social programs apply different definitions of family membership based on the "consuming unit," "assistance unit," or "tax filing unit" that may or may not accurately reflect the reality of children's everyday lives. Only a small handful of data collections such as the SIPP and CPS include indicators available for refined measures of complexity. Our work describes the lives of children by applying an indicator of family complexity that taps family structure and sibling composition. Further attention to the implications of family complexity for child well-being is required.

Acknowledgments

This project was supported by the National Center for Family and Marriage Research, which is funded by a cooperative agreement (5 U01 AE000001-05) between the Assistant Secretary for Planning and Evaluation (ASPE) in the U.S. Department of Health and Human Services (HHS) and the Center for Family and Demographic Research, Bowling Green State University, which has core funding from the Eunice Kennedy Shriver National Institute of Child Health and Human Development (R24HD050959-07).

References

- Artis, Julie E. Maternal cohabitation and child well-being among kindergarten children. *Journal of Marriage and Family*. 2007; 69(1):222–36.
- Bjorklund, Anders; Ginther, Donna K.; Sundstrom, Marianne. Family structure and child outcomes in the USA and Sweden. *Journal of Population Economics*. 2007; 20(1):183–201.
- Brandon, Peter D. Using relationship matrices to identify the diversity in children's living arrangements. In: Hofferth, Sandra L.; Casper, Lynn, editors. *Handbook of measurement issues in family research*. Mahwah, NJ: Laurence Erlbaum Associates; 2007. p. 159–78.
- Brown, Susan L. Family structure and child well-being: The significance of parental cohabitation. *Journal of Marriage and Family*. 2004; 66(2):351–67.
- Brown, Susan L. Family structure transitions and adolescent well-being. *Demography*. 2006; 43(3): 447–61. [PubMed: 17051822]
- Brown, Susan L. Marriage and child well-being: Research and policy perspectives. *Journal of Marriage and Family*. 2010; 72(5):1059–77. [PubMed: 21566730]
- Brown, Susan L.; Manning, Wendy D. Family boundary ambiguity and the measurement of family structure: The significance of cohabitation. *Demography*. 2009; 46(1):85–101. [PubMed: 19348110]
- Brown, Susan L.; Manning, Wendy D.; Bart Stykes, J. Unpublished manuscript. Bowling Green State University; Bowling Green, OH: 2013. Family structure and child well-being: Integrating family and household complexity.
- Bumpass, Larry L.; Kelly Raley, R.; Sweet, James A. The changing character of stepfamilies: Implications of cohabitation and nonmarital childbearing. *Demography*. 1995; 32(3):425–36. [PubMed: 8829975]
- Cancian, Maria; Meyer, Daniel R.; Cook, Steven T. The evolution of family complexity from the perspective of nonmarital children. *Demography*. 2011; 48(3):957–82. [PubMed: 21671198]
- Carlson, Marcia J.; Furstenberg, Frank F. The prevalence and correlates of multipartnered fertility among urban U.S. parents. *Journal of Marriage and Family*. 2006; 68(3):718–32.
- Cherlin, Andrew. Remarriage as an incomplete institution. *American Journal of Sociology*. 1978; 84(3):634–50.

- DeLeire, Thomas; Kalil, Ariel. How do cohabiting couples with children spend their money? *Journal of Marriage and Family*. 2005; 67(2):286–95.
- Dorius, Cassandra. Reconceptualizing family instability to include measures of childbearing: The practical value of assessing multiple partner fertility. Paper presented at the annual meeting of the Population Association of America; 31 March–2 April 2011; Washington, DC. 2011.
- Gates, Gary. Family formation and raising children among same-sex couples. National Council of Family Relations. 2011. Available from <http://www.ncfr.org/ncfr-report/past-issues>
- Gennetian, Lisa A. One or two parents? Half or step siblings? The effect of family structure on young children's achievement. *Journal of Population Economics*. 2005; 18(3):415–36.
- Ginther, Donna K.; Pollak, Robert A. Family structure and children's educational outcomes: Blended families, stylized facts, and descriptive regressions. *Demography*. 2004; 41(4):671–96. [PubMed: 15622949]
- Guzzo, Karen B. New partners, more kids: Multiple-partner fertility in the United States. *The ANNALS of the American Academy of Political and Social Science*. 2014 this volume.
- Guzzo, Karen B.; Furstenberg, Frank F. Multipartnered fertility among young women with a nonmarital first birth: Prevalence and risk factors. *Perspectives on Sexual and Reproductive Health*. 2007a; 39(1):29–38. [PubMed: 17355379]
- Guzzo, Karen B.; Furstenberg, Frank F. Multipartnered fertility among American men. *Demography*. 2007b; 44:583–601. [PubMed: 17913012]
- Halpern-Meehan, Sarah; Tach, Laura. Heterogeneity in two-parent families and adolescent well-being. *Journal of Marriage and Family*. 2008; 70(2):435–51.
- Hofferth, Sandra. Residential father family type and child well-being: Investment versus selection. *Demography*. 2006; 43(1):53–77. [PubMed: 16579208]
- Hofferth, Sandra; Anderson, Kermyt G. Are all dads equal? Biology versus marriage as a basis for paternal investment. *Journal of Marriage and Family*. 2003; 65(1):213–32.
- Kennedy, Sheela; Bumpass, Larry. Cohabitation and children's living arrangements: New estimates from the United States. *Demographic Research*. 2008; 19:1663–92. [PubMed: 19119426]
- Kennedy, Sheela; Bumpass, Larry. Cohabitation and trends in the structure and stability of children's family lives. Paper presented at the annual meeting of the Population Association of America; 31 March 31–2 April 2011; Washington, DC. 2011.
- Kennedy, Sheela; Fitch, Catherine A. Measuring cohabitation and family structure in the United States: Assessing the impact of new data from the Current Population Survey. *Demography*. 2012; 49(4):1479–98. [PubMed: 22826006]
- Kreider, Rose M. Improvements to demographic household data in the Current Population Survey: 2007. Housing and Household Economic Statistics Division Working Paper; Washington, DC. 2008.
- Kreider, Rose Marie; Ellis, Renee. Living arrangements of children, 2009. Washington, DC: U.S. Census Bureau; 2011.
- Manning, Wendy D. Family Profile 10-07. Bowling Green, OH: National Center for Family and Marriage Research; 2010. Trends in cohabitation: Twenty years of change, 1987–2008.
- Manning, Wendy D.; Brown, Susan. Children's economic well-being in married and cohabiting parent families. *Journal of Marriage and Family*. 2006; 68(2):345–62.
- Manning, Wendy D.; Lamb, Kathleen A. Adolescent well-being in cohabiting, married, and single-parent families. *Journal of Marriage and Family*. 2003; 65(4):876–93.
- Musick, Kelly; Michelmores, Katherine. Trends in the stability of marital and cohabiting unions with children. Paper presented at the 2012 annual meeting of the Population Association of America; San Francisco. 2012.
- Raley, R Kelly; Bumpass, Larry. The topography of the divorce plateau: Levels and trends in union stability in the United States after 1980. *Demographic Research*. 2003; 8(8):245–60.
- Raley, R Kelly; Frisco, Michelle L.; Wildsmith, Elizabeth. Maternal cohabitation and educational success. *Sociology of Education*. 2005; 78(2):144–64.
- Seltzer, Judith A. Families formed outside of marriage. *Journal of Marriage and Family*. 2000; 62(4):1247–68.

- Stewart, Susan D. Boundary ambiguity in stepfamilies. *Journal of Family Issues*. 2005; 26(7):1002–29.
- Stewart, Susan D. *Brave new stepfamilies: Diverse paths toward stepfamily living*. Thousand Oaks, CA: Sage Publications; 2007.
- Sweeney, Megan M. Stepfather families and the emotional well-being of adolescents. *Journal of Health and Social Behavior*. 2007; 48(1):33–49. [PubMed: 17476922]
- Sweeney, Megan M. Remarriage and stepfamilies: Strategic sites for family scholarship in the 21st century. *Journal of Marriage and Family*. 2010; 72(3):667–84.
- Tillman, Kathryn Harker. Coresident sibling composition and the academic ability, expectations, and performance of youth. *Sociological Perspectives*. 2008; 51(4):679–711.
- U.S. Census Bureau. SIPP overview. 2006. Available from <http://www.census.gov/sipp/overview.html>
- U.S. Census Bureau. Estimated median age at first marriage, by sex: 1890 to the present. Table MS2. 2012. Available from <http://www.census.gov/hhes/families/data/marital.html>
- Ventura, Stephanie J. Data Brief. Vol. 18. Hyattsville, MD: National Center for Health Statistics; 2009. Changing patterns of nonmarital childbearing in the United States; p. 1-8.
- Yuan; Vogt, Anastasia S. Sibling relationships and adolescents' mental health: The interrelationship of structure and quality. *Journal of Family Issues*. 2009; 30(9):1221–44.

Biographies

Wendy D. Manning is a distinguished research professor in the Department of Sociology at Bowling Green State University. She is the codirector of the National Center for Family and Marriage Research and director of the Center for Family Demographic Research. She studies adolescent relationships, family structure, and union formation and stability.

Susan L. Brown is a professor in and chair of sociology at Bowling Green State University. She also is codirector of the National Center for Family and Marriage Research. Her research addresses patterns of family change and their consequences for individual well-being.

J. Bart Stykes is a doctoral candidate at Bowling Green State University and research assistant for the National Center for Family and Marriage Research. His research interests include survey measurement, family complexity, gender, parenthood, and family formation and well-being.

TABLE 1

Family Complexity: Sibling and Parent Complexity in 1996 and 2009 (in percentages)

	1996	2009
Simple two-biological-parent family	62.7	59.2
Married	61.1	56.2
Cohabiting	1.6	3.0
Only sibling complexity	5.4	5.2
Married	5.0	4.7
Cohabiting	0.4	0.5
Only parent complexity	25.1	28.5
Married	2.8	3.2
Cohabiting	1.4	2.4
Single parent	20.9	22.9
Both sibling and parent complexity	6.8	7.1
Married	3.0	3.5
Cohabiting	0.5	0.9
Single parent	3.3	2.7

SOURCE: SIPP, wave II topical module, panels 1996 and 2008.

NOTE: Parent complexity refers to situations where a child does not live with two biological parents. Sibling complexity identifies children who live with at least one sibling who is not a full, biological sibling. Estimates were limited to children who lived with at least one biological parent.

TABLE 2

Detailed Sibling Composition (in percentages)

	1996		2009	
Mutually exclusive categories				
No siblings	19.1	—	20.1	—
Only full biological siblings	68.7	85.0	67.6	84.6
At least one stepsibling (no half sibling)	1.1	1.3	1.2	1.5
At least one half sibling	11.1	13.7	11.1	13.9

SOURCE: SIPP, wave II topical module, panels 1996 and 2008.

NOTE: Estimates were limited to children who lived with at least one biological parent.

TABLE 3

Family Complexity by Race/Ethnicity, 1996 and 2009 (in percentages)

	White Children		Black Children		Hispanic Children	
	1996	2009	1996	2009	1996	2009
Simple two-biological-parent family	69.2	66.4	29.9	28.3	62.1	56.8
Married	68.0	64.1	28.4	25.6	58.6	51.9
Cohabiting	1.2	2.3	1.5 ^a	2.7	3.5	4.9
Only sibling complexity	5.4	4.8	6.0	4.9	5.1	6.2
Married	5.1	4.4	5.5	4.3	4.3	5.5
Cohabiting	0.3	0.4	0.5 ^a	0.6	0.8	0.7
Only parent complexity	19.6	22.0	51.9	57.8	25.8	29.3
Married	3.2	3.4	2.2	3.1	1.9	2.8
Cohabiting	1.5	2.4	1.4 ^a	2.5	1.3	2.2
Single parent	14.9	16.2	48.3	52.2	22.6	24.3
Both sibling and parent complexity	5.8	6.8	12.2	9.0	7.0	7.7
Married	3.3	3.9	2.8	2.5	2.1	3.7
Cohabiting	0.4	0.9	0.3 ^a	1.1	0.9	1.2
Single parent	2.1	2.0	9.1	5.4	4.0	2.8

SOURCE: SIPP, wave II topical module, panels 1996 and 2008.

NOTE: Parent complexity refers to situations where a child does not live with two biological parents. Sibling complexity identifies children who live with at least one sibling who is not a full, biological sibling. Estimates were limited to children who lived with at least one biological parent. "Other" children were included in the sample but not shown as we are unsure how to interpret their results.

^a Denotes small cell sizes (unweighted frequency less than 30).

TABLE 4

Family Complexity by Parental Education, 1996 and 2009 (in percentages)

	<u>At Least One Parent has a Bachelor's Degree</u>		<u>Neither Parent has a Bachelor's Degree</u>	
	1996	2009	1996	2009
Simple two-biological-parent family	82.2	78.8	57.9	51.7
Married	81.9	77.7	56.0	47.9
Cohabiting	0.3 ^a	1.1	1.9	3.8
Only sibling complexity	3.2	2.7	5.9	6.0
Married	3.1	2.6	5.4	5.4
Cohabiting	0.1 ^a	0.1 ^a	0.5	0.6
Only parent complexity	12.8	15.6	28.2	33.5
Married	2.4	2.1	3.0	3.6
Cohabiting	0.2 ^a	1.2	1.7	2.9
Single parent	10.2	12.3	23.5	27.0
Both sibling and parent complexity	1.8	2.9	8.0	8.8
Married	1.5	2.1	3.4	4.1
Cohabiting	0.1 ^a	0.6 ^a	0.6	1.2
Single parent	0.2 ^a	0.6	4.0	3.5

SOURCE: SIPP, wave II topical module, panels 1996 and 2008.

NOTE: Parent complexity refers to situations where a child does not live with two biological parents. Sibling complexity identifies children who live with at least one sibling who is not a full, biological sibling. Estimates were limited to children who lived with at least one biological parent.

^aDenotes a small cell size (unweighted frequency less than 30).