



Household Complexity and Change among Children in the United States, 1984 to 2010

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Abstract: Research on family instability typically measures changes in coresident parents, but children also experience changes among other household members. The likelihood of experiencing these changes differs by race and ethnicity, family structure, and cohort. Analyses of the Survey of Income and Program Participation show that the cumulative proportion of children who gain or lose a household member is much higher than the proportion of children whose father or mother leaves the household. The share of children who experience a change in household composition involving a nonparent, nonsibling relative is greater among blacks and Hispanics than among whites and greater among children in single-parent families than in two-parent families. Overall, fewer children in the 1990s and 2000s experienced changes in household composition than in the 1980s. This study advances a broader definition of family instability by including others present in children's households, better incorporating the changes in developmental environments children experience.

Keywords: children; family instability; family structure; race/ethnicity; households

As family structures other than two married biological parents have become more prevalent in the United States, scholars have increasingly investigated the implications of nonnuclear family structures for children's well-being. This body of research tends to find that children living with two married biological parents fare better than children growing up with any other household configuration, such as single mother, married stepfamily, or cohabiting union households (McLanahan, Tach, and Schneider 2013). Though much of this research treats family structure as a static characteristic, it is better characterized as a dynamic process; a substantial proportion of children experience many different family structures and family structure transitions during childhood (Aquilino 1996; Beck et al. 2010; Cavanagh 2008; McLanahan 2011). One theory connecting family structure to child outcomes argues that the stress of family structure disruption contributes to worse outcomes for children living in nonnuclear family structures (Aquilino 1996; Foster and Kalil 2007).

Divorce and the subsequent departure of a parent is the most common family structure disruption studied in prior research, with general agreement that this transition is linked to negative outcomes in childhood and adolescence and across generations (Amato and Cheadle 2005; Cherlin, Kiernan, and Chase-Lansdale 1995; Kim 2011). Multiple transitions among family structures are associated with lower school engagement, externalizing behavior, and negative relationships with teachers and peers in young children (Cavanagh and Huston 2006; Fomby and Cherlin 2007; Fomby and Osborne 2010; McLanahan 2011) and lower educational attainment, early home leaving, premarital childbearing, depression, delinquency, and drug use in adolescents (Aquilino 1996; Brown 2006; Cavanagh 2008; Wu 1996). Parental

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relationship transitions (e.g., divorce) are also associated with maternal parenting stress, harsh parenting, and parent mental health (Beck et al. 2010; McLanahan 2011). Cavanagh and Huston (2006) found evidence that children in the most disadvantaged contexts, those characterized by maternal depression, poverty, and a poor home environment, are most affected by family structure instability.

Changes in parental romantic relationships are important as a measure of family instability, but children are exposed to many other potentially consequential changes in the composition of their households. Nonparental changes, such as the departure of grandparents, aunts, and cousins, are associated with early childhood cognitive scores in a nationally representative sample of children born in 2001 (Mollborn, Fomby, and Dennis 2012). Building on Mollborn et al.'s (2012) finding that extended household transitions were more common than parent and partner transitions among children younger than age 2, I show in this article that this pattern of greater exposure to changes involving nonparent household members holds among children up to age 15 across multiple cohorts from 1984 to 2010. As a result, prior research focused exclusively on parents may be missing a substantial source of instability in children's lives, and analyses seeking to identify the consequences of family structure change for child well-being should be broadened to consider the contributions of other relatives and nonrelatives to household instability. That household composition changes involving nonparent relatives and/or nonrelatives are disproportionately experienced by nonwhite children and children in households without two parents also means that we have an incomplete understanding of subgroup differences in family structure and household instability.

This study addresses this gap in knowledge by considering changes in household composition beyond parents that children experience and assesses whether characteristics of the child and household, particularly the child's race and ethnicity and family structure, predict greater or lesser exposure to these changes. Just as Raley and Wildsmith (2004) descriptively demonstrated the importance of including maternal transitions into and out of cohabitation in measures of family instability, I aim in this study to document the contribution of other individuals to changes in children's developmental contexts. I estimate exposure to changes in household composition in a nationally representative sample of children younger than 15 years of age using the Survey of Income and Program Participation (SIPP) from 1984 to 2010. I find that the entry and exit of nonparent, nonsibling relatives, whom I call "other relatives," are substantial sources of household composition changes experienced by children, far exceeding the number of changes in parental figures to which children are exposed. This implies that research focusing narrowly on parental relationship changes misses a potentially important type of household change to which children are exposed and that estimates of the effect of family structure change may be biased if other relatives are not accounted for in the measure of family change. I describe the composition of this group of relatives, most of whom are grandparents, aunts, and uncles, and how the composition varies by race and ethnicity.

I also assess whether and how children's exposure to household change has changed over time. Rates of marriage, divorce, cohabitation, and childbearing and the characteristics of those involved have all changed over the last 30 years, with

women generally cohabiting before marriage and marrying later, an increase in nonmarital births, and declining divorce rates among younger adults (Kennedy and Ruggles 2014; Kreider and Ellis 2011; Manning 2013; Martin et al. 2015). The increase in nonmarital births has the potential to expose children to more changes in household composition, whereas delayed marriage and declining divorce rates could result in fewer changes in household composition for children. In all, more recent cohorts of children may be exposed to different types or levels of household change than earlier cohorts of children. Therefore, it is important to examine trends in children's exposure to household change over time to assess whether changes in family formation and dissolution have led to changes in the types and quantities of household changes children experience.

Motivation and Research Strategy

Although nearly all research on family instability has focused on parental relationship changes as the source of instability, a growing number of scholars argue for a more comprehensive view of instability, capturing other types of household composition changes that are potentially consequential for children (Condliffe, Warkentien, and DeLuca 2013; Mollborn, Fomby, and Dennis 2011; Warkentien, Condliffe, and DeLuca 2013). Prior research has investigated the consequences of extended family coresidence for children and the role that doubling up plays for families in need, suggesting that there may be meaningful consequences of instability in these households for children's outcomes. Bengtson (2001) argued that among single-parent or other nonnuclear families, multigenerational bonds play an increasingly important role, and single mothers are more likely than other types of households to live in multigenerational households (Cohen and Casper 2002; Pilkauskas 2012). Compared with living with a single mother alone, children living with a single mother and at least one grandparent are less likely to be poor or near poor (Mutchler and Baker 2009); living in a doubled-up or multigenerational household can be a response to economic need (London and Fairlie 2006; Pilkauskas 2012). Although children often have more economic resources in multigenerational households, grandparent coresidence may not be positive in all respects. Chase-Lansdale, Brooks-Gunn, and Zamsky (1994) found that grandmother coresidence with young mothers and their children is negatively associated with both mother and grandmother parenting quality in a sample of low-income African American families. Single mothers may prefer to raise their children in a nuclear family unit rather than relying on extended family for support (Edin and Kefalas 2005; Harvey 2015).

These studies demonstrate the association between extended family coresidence and child outcomes at one point in time, but multigenerational families are characterized by a great degree of instability. Glick and Van Hook (2011) found that very few households containing more than one family unit have consistent household composition over time—after one year, 62 percent of multifamily households experienced some change in composition, and after five years, 93 percent of households had changed; multifamily households containing young children are somewhat more likely than those without children to experience change. Pilkauskas (2012)

also documented considerable fluidity in three-generation households. Research on child outcomes should account for the frequent transitions between two- and three-generation households, integrating extended family instability into the literature on parental relationship changes. Mollborn et al. (2012) looked at a single cohort of children born in 2001 and found that having grandparents or other adults join or leave a child's household is associated with child cognitive outcomes independent of parent relationship transitions. Effects differed by race, with nuclear households most advantageous for white children, who were negatively affected by any transition in extended family or other relatives. African American children were also negatively affected by transitions, but stable grandparent coresidence predicted higher cognitive scores for black children than other family arrangements. Finally, instability appeared to benefit Latino children, as those experiencing extended family or other adult transitions had the highest cognitive scores compared with Latino children in other living situations.

Given that prior research demonstrates that instability in residential parental figures has negative effects on children's outcomes, above and beyond the effects of family structure, and also demonstrates that household composition beyond parental figures is associated with child outcomes, it is likely that instability involving nonparental household members also affects children's outcomes. It is therefore relevant to assess the extent to which children are exposed to these transitions and how exposure varies by race, family structure, and cohort. The entry or exit of household members other than parents and their partners could affect children through the quantity and quality of household resources available to them. In particular, parenting quality may suffer as individuals join or leave the household if these changes place additional burdens on children's parents. Conversely, children may have better outcomes as a result of changing household composition if these changes bring additional resources or supervision to the household. Household transitions may additionally affect children negatively if the change itself is a stressful disruption in the routine functioning of the household.

Many studies investigating the consequences of family instability assess differences in effects by race and ethnicity, finding generally that family instability has negative effects on white children but not uniformly negative effects on black or Hispanic children (Fomby and Cherlin 2007; Mollborn et al. 2012). Blacks and Hispanics are more likely than whites to live in multigenerational homes (Cohen and Casper 2002; Pilkauskas 2012), and some work (Fomby, Mollborn, and Sennott 2010; Mollborn et al. 2012) has proposed mechanisms such as social protection and exposure to disadvantaged neighborhoods that might explain these differences. Differential exposure to changes in household composition among black and Hispanic children could relate to why they are differentially affected by family instability: if changes are more common among black and Hispanic children, they may be better able to adapt to a new household structure. My analyses assess whether and by how much black and Hispanic children experience different patterns in changes in household composition.

Accounting for Social Change

Over the time frame analyzed in this article (1984 to 2010), there have been substantial changes in patterns of marriage, childbearing, and cohabitation that could contribute to trends in children's exposure to household change. Understanding these changes may help us understand trends in children's exposure to changes in household composition. The average age at marriage has increased over the last 30 years: by 2011 the median age at first marriage among women was 26.5 compared with 22.3 in 1981 (Kreider and Ellis 2011). Changes in childbearing are related to changes in marriage. Between 1980 and 2010, the percent of births occurring to unmarried women more than doubled, increasing from 18.4 percent to 40.8 percent (Martin et al. 2015). Children born to unmarried women could, on average, be exposed to more household change than children born to married women, in part because cohabiting parents are much more likely than married parents to dissolve their unions but also because such women are quite likely to repartner (Andersson 2002; Beck et al. 2010). Increasing shares of children born to unmarried women suggest that a greater portion of children overall could face changes in household composition.

Trends in divorce and cohabitation, however, suggest that children in more recent cohorts could have lower exposure to parental change than children in older cohorts. Although the most recent age-adjusted divorce rates show that divorce rates have not declined overall, there are distinctive patterns by cohort that place children at decreased risk of seeing their parents' marital unions dissolve. Divorce rates have increased among people older than age 35, yet the divorce rate among younger couples—those in their prime family-building years—is steady or declining (Kennedy and Ruggles 2014; Schoen and Canudas-Romo 2006). The pattern among older cohorts is in part driven by a “divorcing generation,” the baby boom cohort who continues to experience high rates of divorce even into retirement (Kennedy and Ruggles 2014).

Changes in cohabitation are tied to changes in marriage and divorce. In the 2000s and 2010s, a much greater percentage of women have ever cohabited compared with in the 1980s and 1990s, and two-thirds of women who married between 2000 and 2010 cohabited before marriage (Manning 2013). In addition to being more prevalent, cohabiting unions have also become less stable overall, with fewer of them transitioning to marriage and more of them dissolving over a three-year period (Guzzo 2014). But Musick and Michelmore (2015) showed that dissolution rates specific to cohabiting couples with children have declined over time, leading to fewer children in cohabiting unions exposed to parental change than in the past. The increase in children born to unmarried parents suggests children may be exposed to more household changes in the 2000s and 2010s than in the 1980s and 1990s (Brown, Stykes, and Manning 2016), whereas more union stability among married and cohabiting parents of children suggests a countervailing force of stability, leading to less exposure to household change over time.

Data and Methods

I use the U.S. Census Bureau's SIPP to analyze trends in children's exposure to household changes. The SIPP data include panels of nationally representative households that are followed for a period of two-and-a-half to four years. The first panel began in 1984 and there have been 14 panels of data collected, the most recent in this format beginning in 2008. This design allows me to prospectively track changes in households within panels (because the SIPP collects household roster data every four months over a period of two-and-a-half to four years) and compare the prevalence of household changes across different characteristics of households to determine whether exposure to household changes differs by group. The SIPP is an especially useful data source for this research question because it includes longitudinal data for large, nationally representative samples, between 35,000 and 45,000 households per panel for the 1996 to 2008 panels.

I use the 1984, 1987, 1990, 1996, 2001, 2004, and 2008 SIPP panels. There are between seven and 12 waves per panel. For these analyses I employ the SIPP's longitudinal panel weights that adjust for sampling design and nonresponse; therefore, my analysis is limited to the waves in each panel covered by these weights. The SIPP collects data on each person living in a sampled household at all waves of the panel. If a member of a sampled household moves to a new address, the SIPP follows that person and collects data on each person in his or her new household. This data collection strategy allows for a dynamic and comprehensive accounting of each original sample member's household at every wave of the survey.

I take a child-focused approach to examining changes in household composition, which I conceptualize as an indicator of family instability. I limit my sample to households with children and I use the detailed SIPP data to create a complete household roster at each wave of data collection. Each wave of the SIPP includes a core module with a household relationship variable. This variable indicates each household member's relationship to the household reference person (often the head of household). I use this variable to assign each household member a relationship to each child in the household (see Appendix A in the online supplement for matching of each detailed relationship to an aggregate category). If the subject child is listed as a child of the reference person, I assign the household reference person as mother or father on the basis of sex. I also assign any spouse of the household reference person as mother or father on the basis of sex. This means that stepmothers and stepfathers are included in the mother and father categories I analyze in this article, as it is not possible to consistently distinguish biological parents from stepparents across SIPP panels. For the purposes of this descriptive analysis, combining biological and stepparents is not problematic because my focus is on identifying individuals other than parental figures who contribute to changes in household composition. Although family instability research typically distinguishes between biological parents and stepparents, and there is reason to think relationships between biological parents and their children differ from those between stepparents and stepchildren, it is appropriate to group them together here to account for the changes captured by conventional measures of family instability.

The SIPP data also include the survey identification number of any parent who lives in a SIPP-surveyed household with his or her minor or adult children. If I cannot assign parents to children on the basis of the reference person and spouse of the reference person indicators, and the child lives with at least one parent, I use the survey identification number of the child's parent to identify that person as mother or father. This allows me to link parents and children in nonnuclear households where the parent is not the reference person. The findings I present here are based on an analytic sample of children younger than age 15. The sample includes 72,312 children across seven panels.

In this article I focus on four measures of household instability. The first two capture the traditional measures of parental figures leaving or joining the household: change involving mother and change involving father. I do not distinguish between changes in which the parent moves into a child's household versus changes in which the child moves into the parent's household: in both cases the child experiences a change involving a parent. The remaining two measures of household instability broaden the scope beyond changes in parental figures to include other relatives (e.g., grandparent, aunt, uncle, cousin) and nonrelatives (e.g., roommate, friend) entering or leaving the child's household. I do not measure the entry or exit of children's siblings in this analysis because supplemental analyses show that most changes involving siblings are normative (i.e., a new sibling being born or an older teenage sibling leaving the household) and thus different in kind from the household changes I measure here (I return to this point in the limitations section below).

I calculate weighted cumulative percentages of children exposed to each distinct type of household change. I follow children over six waves of data collection and add the percentage of children who experience each type of change at each wave to the percentage of children experiencing that type of change in any prior wave. I report aggregate cumulative percentages by type of change and then disaggregate the cumulative percentage calculations by race and ethnicity and family structure at wave 1. To assess whether children's exposure to household change has increased or decreased over the last 30 years, I also disaggregate the cumulative percentage calculations by panel (1984, 1987, 1990, 1996, 2001, 2004, and 2008) and compare the percentages among children in the first panel with children in the final panel.

Results

Table 1 presents weighted sample statistics across the seven SIPP panels. The children are between eight and nine years old, on average, when the observation period ends, though children who range from 0 to 14 at wave 1 are included in the analysis. In the 1984 panel, close to three-quarters of the children are white, with blacks and Hispanics making up 15 percent and 9 percent of the sample, respectively. Across the panels, the proportion of children who are white declines to 56 percent by 2008, and the proportion of Hispanic children increases to 22 percent. Household size, averaging about 4.5 members, stayed fairly constant across panels. A very high proportion of these young children live with mothers or mother figures at the start of observation (approximately 95 percent), whereas the proportion who live with

Table 1: Weighted sample statistics across 1984, 1987, 1990, 1996, 2001, 2004, and 2008 SIPP panels.

	1984	1987	1990	1996	2001	2004	2008
	Mean	Mean	Mean	Mean	Mean	Mean	Mean
Age at End of Period	8.51	8.47	8.49	8.70	8.89	8.90	8.61
Standard Deviation of Age	(4.42)	(4.32)	(4.33)	(4.26)	(4.27)	(4.38)	(4.49)
Race and Ethnicity							
White	0.72	0.71	0.70	0.65	0.62	0.59	0.56
Black	0.15	0.15	0.14	0.16	0.16	0.15	0.14
Hispanic	0.09	0.11	0.11	0.14	0.17	0.19	0.22
Other Race	0.04	0.04	0.04	0.05	0.05	0.07	0.08
Wave 1							
Household Size	4.67	4.53	4.52	4.56	4.59	4.52	4.56
Standard Deviation of Household Size	(1.7)	(1.51)	(1.49)	(1.45)	(1.63)	(1.50)	(1.55)
Two Parent	0.76	0.75	0.75	0.75	0.73	0.73	0.72
Single Parent	0.22	0.24	0.23	0.23	0.23	0.24	0.25
No Parent	0.02	0.02	0.02	0.03	0.03	0.03	0.03
Live with Mother	0.96	0.96	0.96	0.96	0.94	0.95	0.94
Live with Father	0.78	0.77	0.76	0.76	0.76	0.76	0.75
Live with Grandparent	0.06	0.06	0.06	0.06	0.07	0.07	0.08
Mother's Age	32.66	33.21	33.27	34.43	35.06	35.28	35.56
Standard Deviation of Mother's Age	(7.07)	(6.67)	(6.68)	(6.65)	(7.08)	(7.29)	(7.51)
Father's Age	35.83	35.88	36.36	37.41	38.08	38.16	38.53
Standard Deviation of Father's Age	(7.68)	(7.16)	(7.11)	(7.11)	(7.51)	(7.76)	(8.06)
Waves	6	6	6	6	6	6	6
N	3,794	5,061	10,489	12,877	12,219	15,749	12,123

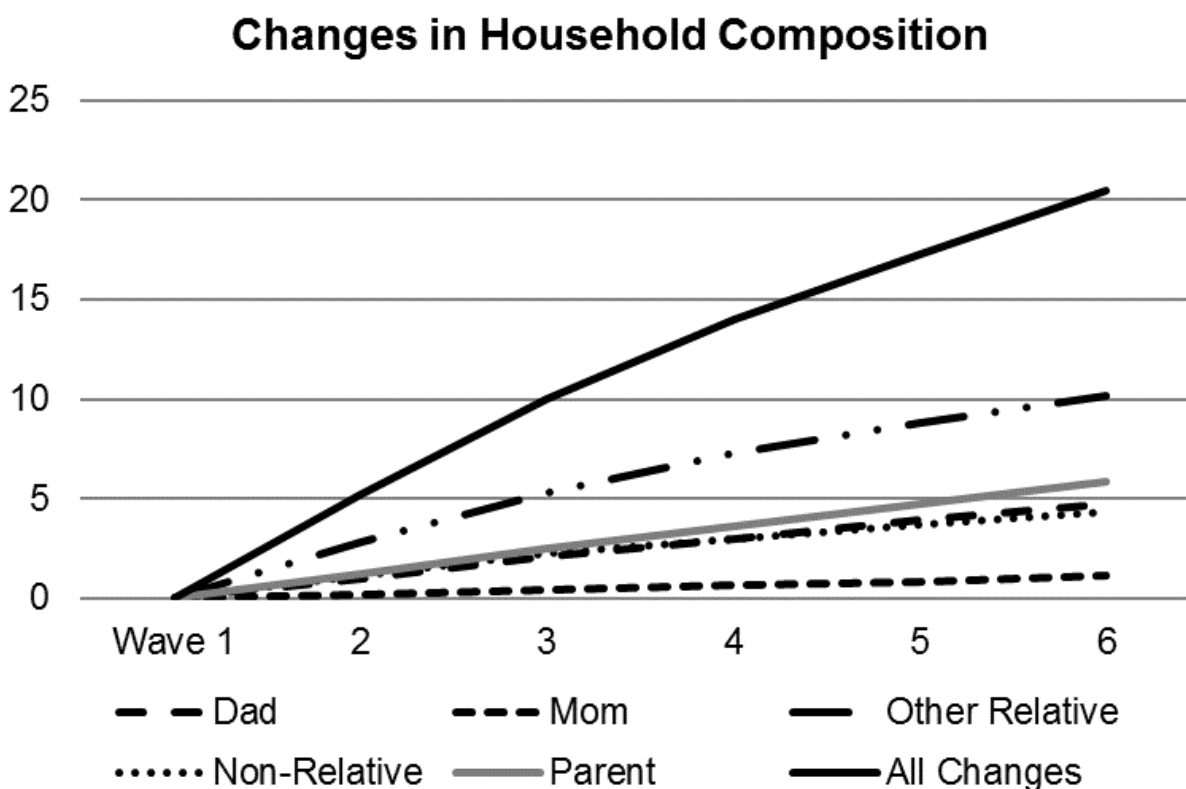


Figure 1: Weighted cumulative percent of children exposed to changes in household composition: pooled 1984 through 2008 panels.

fathers or father figures is lower, at between 75 percent and 78 percent across panels. Given the rise in births to unmarried mothers over the time span of my analysis, it may be surprising that there is not a more prominent decline over the panels in the proportion of children who live with fathers at the beginning of observation. I count children whose parents are cohabiting but not married as living with their fathers and mothers. Across panels, approximately six to eight percent of children live with at least one grandparent at wave 1. Finally, the children's coresident mothers are on average about 33 years old in 1984 and 36 years old in 2008, and their coresident fathers are on average 36 years old in 1984 and 39 years old in 2008.

Figure 1 demonstrates that children are exposed to changes in their household composition beyond what is captured by looking at the exit or entry of parental figures. The figure shows the weighted cumulative percentage—over six waves of data collection pooled across all panels—of children who experience household changes involving a father figure, a mother figure, a nonparent, nonsibling relative (an other relative), and a nonrelative. The type of household change affecting the greatest share of children is that involving a nonparent, nonsibling relative; more than 10 percent of children experience this type of change over the course of two years. A similar share of children experience a change involving a nonparent,

nonsibling relative compared with children who experience all other types of household change combined. Figure 1 combines entrances and exits from children's households, but the pattern is similar if I plot only entrances or only exits (results available upon request). The gray solid line represents the percent of children exposed to parental transitions, those changes traditionally captured by measures of family instability, and the black solid line represents the 20 percent of children who experience a change involving parents and/or other relatives and nonrelatives. Measures of parental transitions miss household changes experienced by 14 percent of children.

Who are these nonparent, nonsibling relatives living with children and moving in and out of their households? Selected panels and waves of the SIPP survey include a household relationship matrix that identifies every household member's relationship to every other person living in the household at that point in time. I use this matrix from the 1996 and 2008 panels, available once per panel, to provide a more detailed assessment of how individuals in the other relative category are related to children in my sample. Overall, grandparents represent the biggest proportion of other relatives living in children's households at any given time. Grandparent coresidence also appears to be more stable than coresidence with aunts, uncles, and cousins. Cousins are the most frequent type of other relative to leave and join children's households, representing 30 percent to 40 percent of changes in this category, followed by aunts and uncles and then grandparents, who represent only 20 percent of other relative transitions even though they account for approximately 40 percent of the nonparent, nonsibling relatives who live with children.

Heterogeneity in Change by Family Structure and Race

These estimates of the average share of children exposed to different types of household change mask considerable heterogeneity by family structure and race, two characteristics of children and their households that are associated with other features of their developmental environments and eventual outcomes. Here I focus on differences by group in the other relative and nonrelative category because the aggregate analysis shows more children are exposed to these changes than are exposed to a parent leaving or joining their household, and the patterns for parental figures have been documented elsewhere (Fomby et al. 2010; Mitchell 2013). Further, the differences by racial and ethnic group and family structure group are most pronounced for these types of household change. For example, if we look only at the proportion of children experiencing a parent leaving the household, there are negligible differences by race, but examining the proportion of children who experience the departure of a relative or nonrelative reveals striking differences by race missed by the traditional measures of family structure change. This matters because any differences by race in the effects of family instability could be the result of household transitions among extended family and nonrelatives rather than other mechanisms proposed in the literature.

I categorize children by family structure at wave 1: living with two parents (both biological or one biological and one stepparent; 74 percent of sample), living

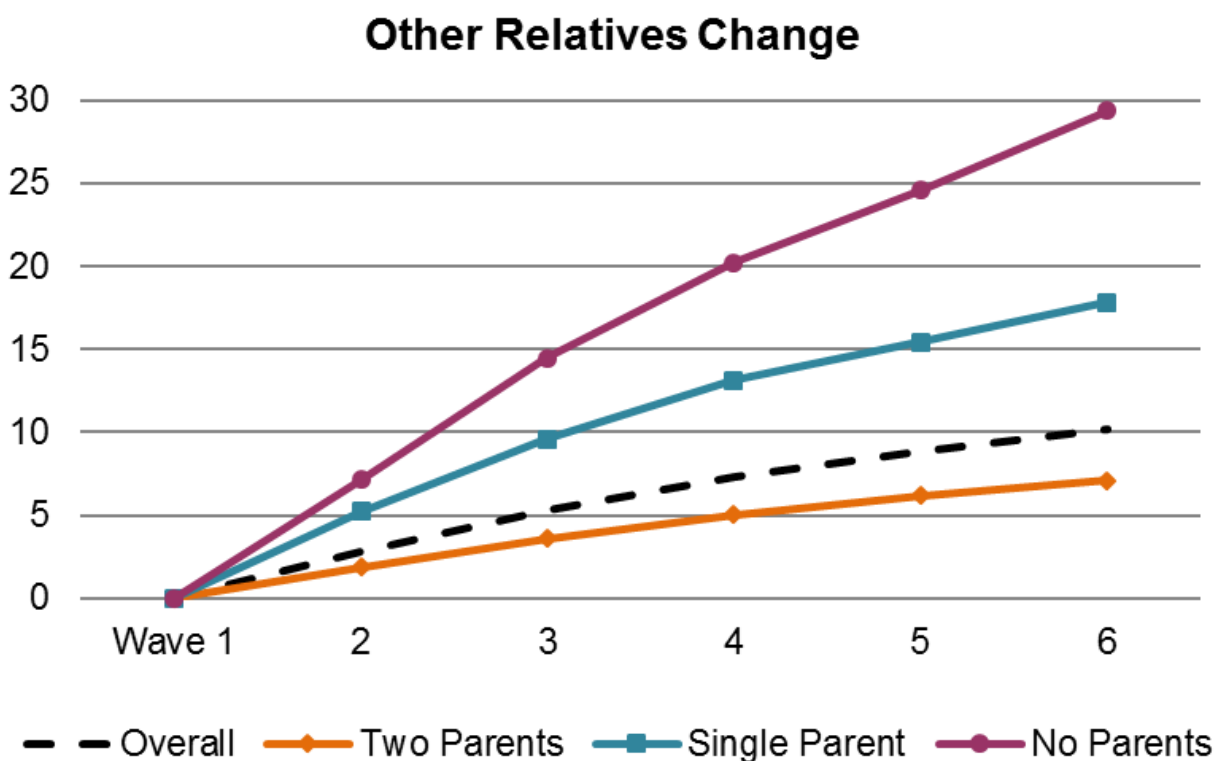


Figure 2: Weighted cumulative percent of children (by family structure) exposed to other relatives leaving and joining household.

with a single parent (mother or father; 24 percent), or living with no parents (2.5 percent). Figure 2 shows that approximately 10 percent of children overall are exposed to household changes involving other relatives, but these types of changes are much more common among children living with single parents or no parents at the start of data collection. By the end of six waves of data collection, or about two years, 18 percent of children living with a single parent had experienced a change involving extended family and 29 percent of children living with no parents experienced this change, compared with seven percent of children who started with two parents. Figure 3 shows that a much lower share of children in two-parent homes than children in single-parent and no-parent homes are exposed to the exit or entry of nonrelatives: slightly more than two percent of children in two-parent homes compared with 10 and 11 percent of children in single- or no-parent homes, respectively. Taken together, the analysis of exposure to extended family and nonrelative household change shows that children who start out in households conventionally viewed as disadvantaged, those with only one parent or no parents present, have a higher likelihood of experiencing changes in household composition than do children who start out in more advantaged households.

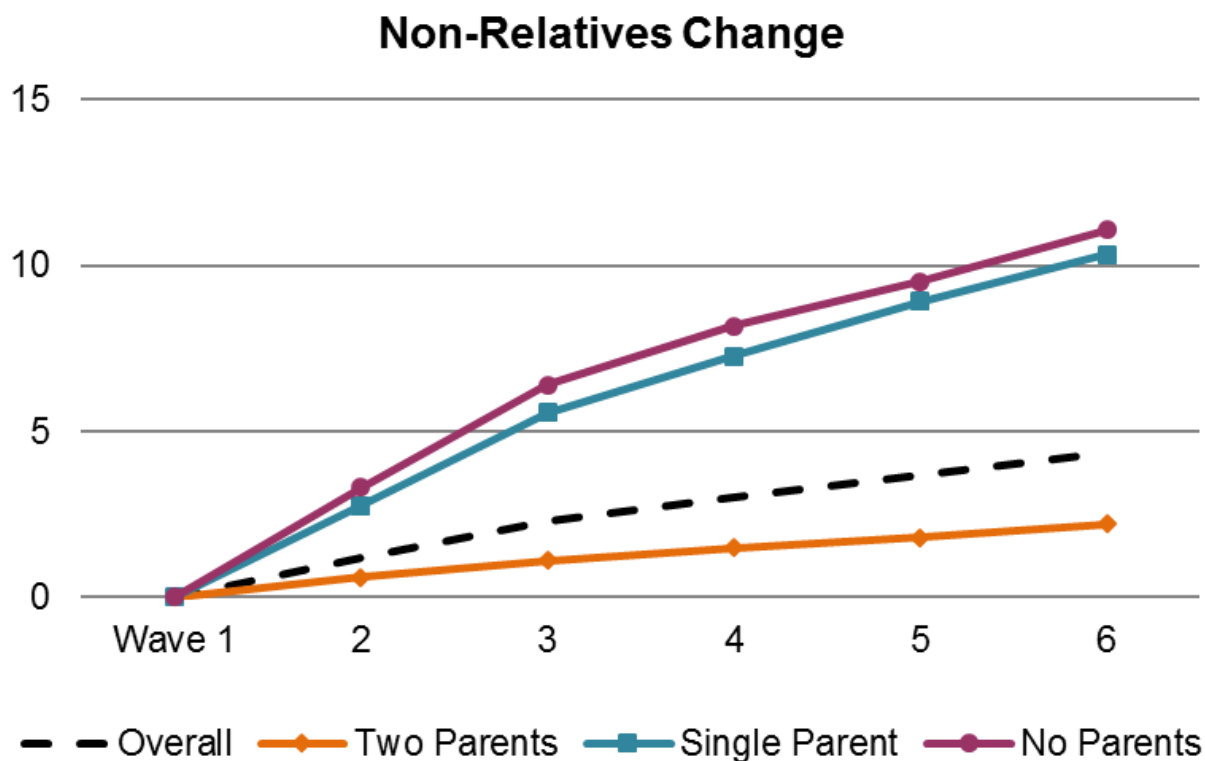


Figure 3: Weighted cumulative percent of children (by family structure) exposed to nonrelatives leaving and joining household.

Figure 4 shows weighted cumulative percentages of children across panels exposed to the entry or exit of a nonparent, nonsibling relative, overall and within three racial and/or ethnic groups. The dashed line represents the overall proportion, showing that 10 percent of children experienced a change involving an extended family member by the end of two years; the lines marked by squares and circles show the relatively higher exposure to this change among black and Hispanic children (at 17 and 18 percent) compared with white children (at six percent by the end of observation), designated by the diamond markers. The contribution of cousins, aunts, and uncles to extended family household transitions is especially pronounced among black and Hispanic children. This analysis by race demonstrates that even over a relatively short period of two years, nonwhite children are disproportionately exposed to changes in household composition as a result of nonparent, nonsibling relatives entering and exiting their households.

These findings by family structure and race and ethnicity result from a pooled analysis of all seven SIPP panels, but there is reason to suspect that the proportion of children exposed to changes in household composition may have changed over time as the marital and cohabiting unions containing children have become more stable over time (Kennedy and Ruggles 2014; Musick and Michelmore 2015).

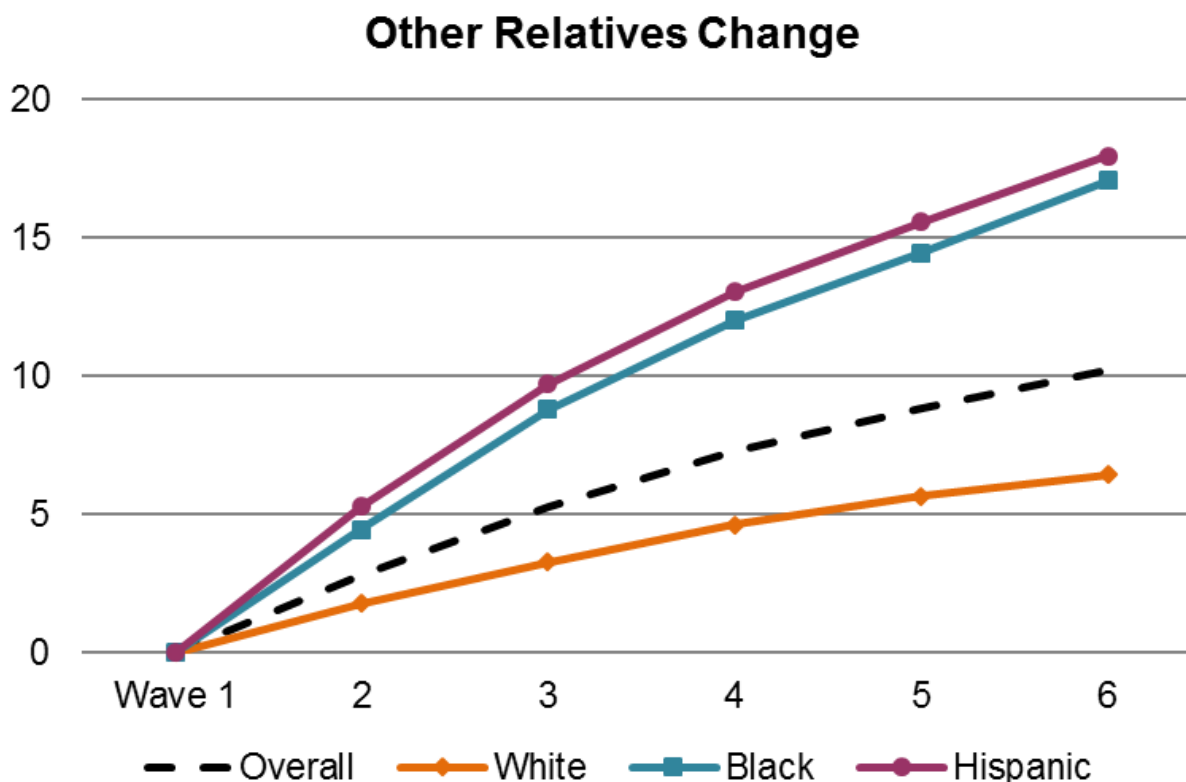


Figure 4: Weighted cumulative percent of children (by race and ethnicity) exposed to other relatives leaving and joining household.

Change over Time

Following the cumulative percentage analysis by family structure and race above, I present cumulative percentages of children in the 1980s experiencing changes involving other relatives compared with children in the 2000s. Fewer children in the 2000s experienced such changes than in the 1980s, but this trend is clearer when I disaggregate by children's race and ethnicity and wave 1 family structure: two parent, single parent, or no parent. In Figures 5 through 7 I present weighted cumulative percentages of children experiencing changes involving nonparent, nonsibling relatives over the course of two years (when observation ends) in the first panel (1984) and last panel (2008) in my sample, with the pooled percentage for children in all seven panels shown as the dashed line (I present only the first and last panel in the figure for clarity; results for all seven panels are shown in Appendix B in the online supplement). Figure 5 shows a modest reduction from 11 percent to 10 percent in the share of children in 1984 who experience a change involving other relatives compared with the share of children in 2008 experiencing this change.

Trends in children's exposure to the entry and exit of other relatives are more evident when I disaggregate the sample on the basis of wave 1 family structure.

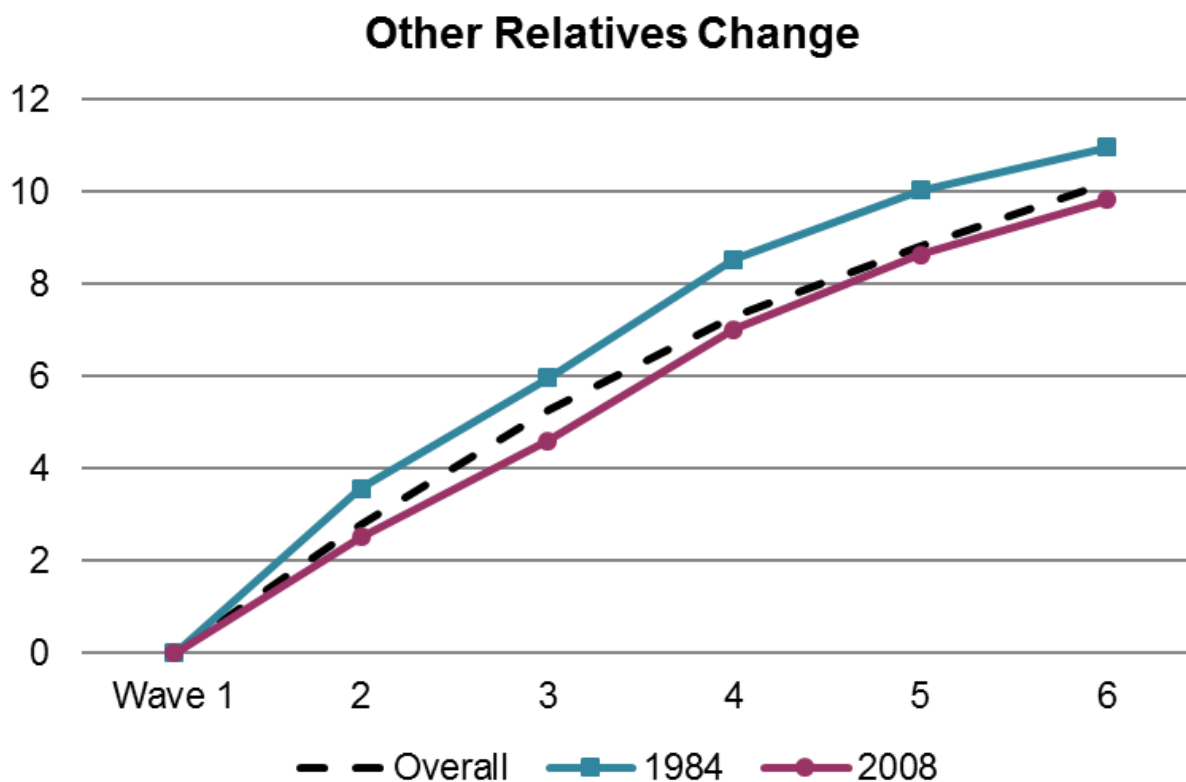


Figure 5: Weighted cumulative percent of children (by panel) exposed to other relatives leaving and joining household.

There are no clear time trends in children's exposure to the entry or exit of other relatives among children starting in two parent families. The cumulative percentages in Figure 6, however, show that a smaller share of children of single parents in the 2008 SIPP panel experience changes involving other relatives than in the 1984 panel. Almost 27 percent of children in the 1984 panel experienced this type of change over two years, whereas only 14 percent of children in the 2008 panel did.

Among white and Hispanic children there do not appear to be clear time trends in the movement of other relatives in and out of the household. There are, however, substantial differences by panel among black children in exposure to other relatives leaving or joining the household, as shown in Figure 7. Whereas 25 percent of black children in the 1984 panel experienced changes in coresident extended family members, only 14 percent of black children in the 2008 panel experienced this type of change.

Overall, these results suggest that children in the more recent SIPP panels are exposed to fewer changes in household composition than children in the earliest SIPP panels. This is particularly evident among children who begin the panel in single-parent homes and among black children, two groups that are, on average, more disadvantaged than children who live with two parents and white children.

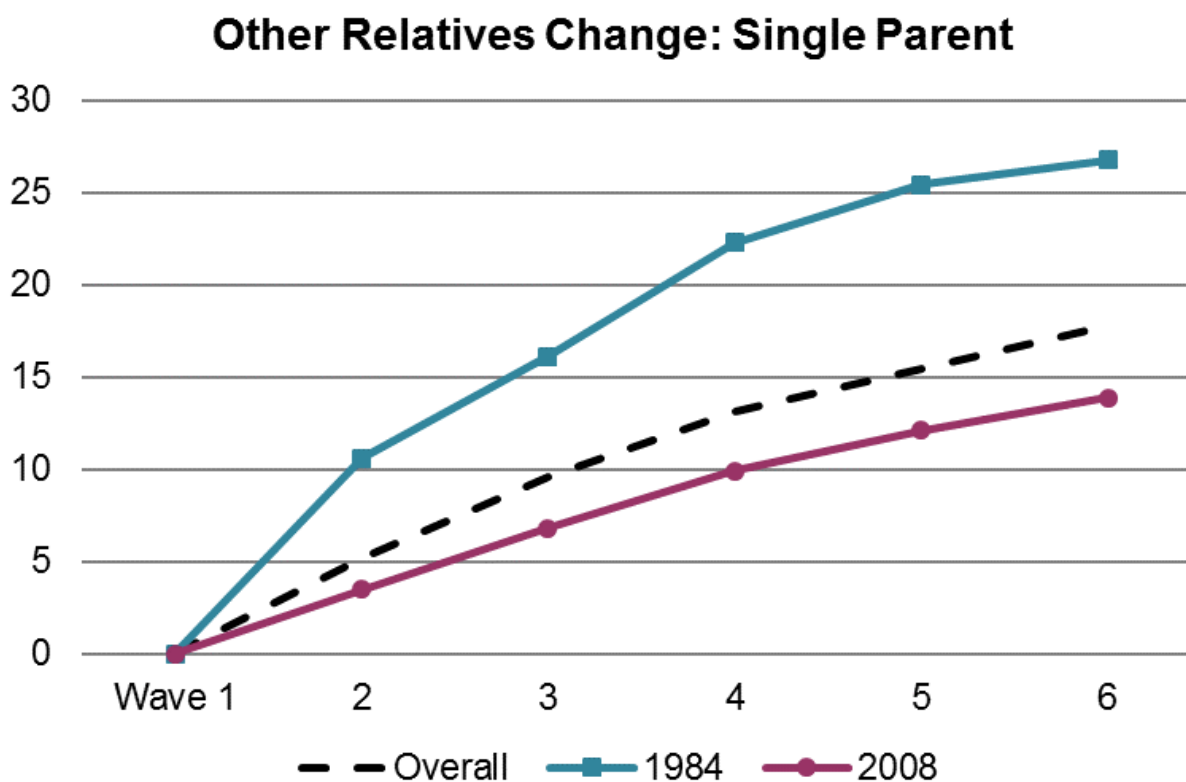


Figure 6: Weighted cumulative percent of children (by panel) living with single parents and exposed to other relatives leaving and joining household.

To the extent that changes in household composition are disruptive and harmful to children, having fewer of them in the more recent cohorts is beneficial, especially if fewer children in traditionally more disadvantaged groups are exposed to negative events.

Supplementary Analysis: The Value of Frequent Data Collection

The SIPP is unusual among longitudinal studies in the frequency with which it surveys households. The 1984 to 2008 panels of the SIPP collected data from households every four months, and a complete household roster was recorded at each wave of data collection. This enables me to capture changes in household composition that may be missed by longitudinal studies with less frequent contact with respondents. The National Longitudinal Survey of Youth 1979 and the Panel Study of Income Dynamics were both initially annual surveys that now collect data from households every two years, potentially missing changes occurring between waves. The Fragile Families and Child Wellbeing Study, a commonly used data set for examining children's developmental environments and consequences of family instability, records information about children's living environments at

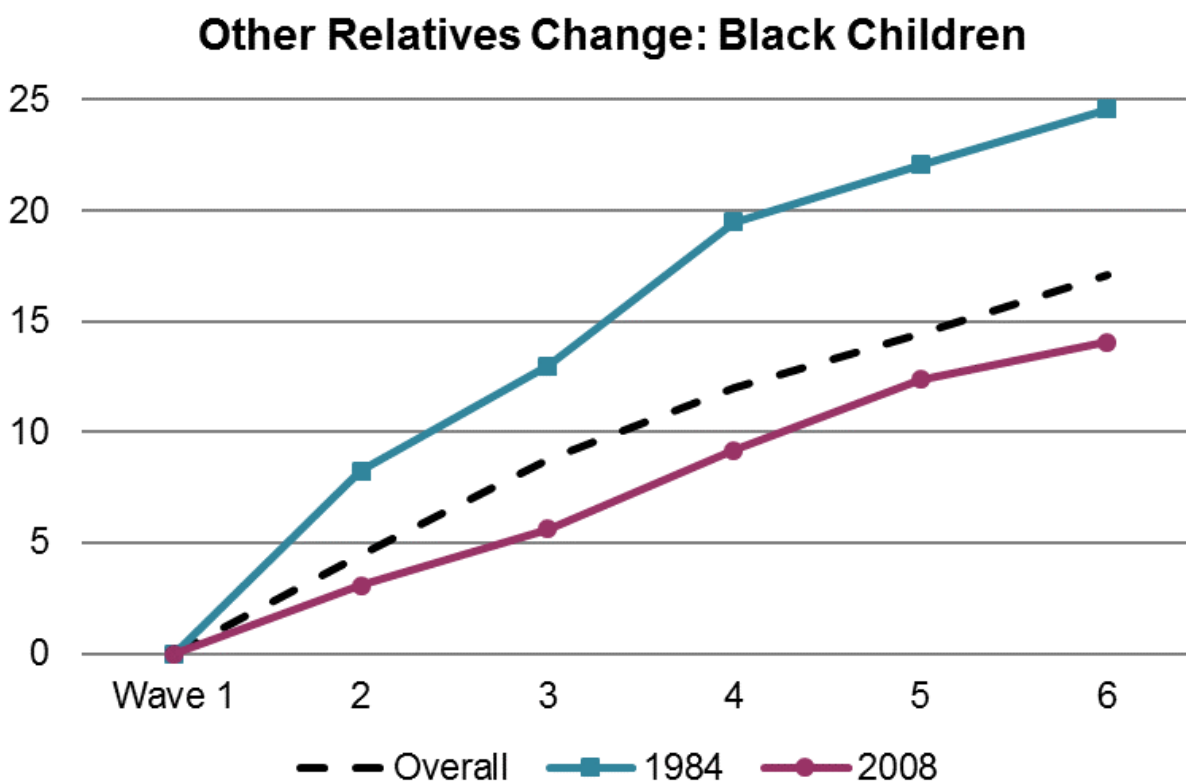


Figure 7: Weighted cumulative percent of black children (by panel) exposed to other relatives leaving and joining household.

birth and ages one, three, five, nine, and 15. The study design, with multiyear gaps between waves, suggests that this survey may not fully capture changes in children's household composition beyond parental romantic transitions, which are reported retrospectively.

To check whether the frequency of data collection affects my measures of exposure to household change, I compare the cumulative percentage of children experiencing various types of household change when measured every four months with an annual measure of exposure to household change that I construct by matching every third wave of data collection in the 1984, 1996, and 2008 panels. Table 2 shows cumulative percentages of children who experienced household changes over two years, estimated with the annual measure and the four-month measure. In the 1984 panel, the ratio of the annual measure of household change to the more frequent four-month measure is 0.81 on average across types of changes. After two years, the annual measure shows that 3.42 percent of children have experienced a father figure leaving their household compared with the four-month measure, which shows 4.08 percent of children have experienced this change: a ratio of 0.84. Annual measures from the 1984 panel generally capture an even lower proportion of the children exposed to the entries and exits of other relatives and nonrelatives.

Table 2: Weighted cumulative percent of children (by SIPP panel) experiencing change after two years: annual and four-month measure and ratio of annual to four-month measure.

Type of Change	1984			1996			2008		
	Annual	Four Month	Annual to Four Month Ratio	Annual	Four Month	Annual to Four Month Ratio	Annual	Four Month	Annual to Four Month Ratio
Mother Left	1.25	1.22	1.02	0.71	0.81	0.88	1.06	1.26	0.84
Mother Joined	0.61	0.66	0.92	0.41	0.53	0.77	0.49	0.65	0.75
Father Left	3.42	4.08	0.84	3.35	3.64	0.92	3.15	3.45	0.91
Father Joined	2.45	2.99	0.82	2.43	2.77	0.88	1.84	2.16	0.85
Other Relative Left	7.61	9.36	0.81	6.24	7.90	0.79	6.38	7.33	0.87
Other Relative Joined	6.06	7.95	0.76	5.28	7.27	0.73	5.47	6.72	0.81
Nonrelative Left	1.83	2.92	0.63	2.95	3.38	0.87	2.52	3.12	0.81
Nonrelative Joined	2.42	3.45	0.70	2.36	3.07	0.77	2.62	3.38	0.78
Average Ratio			0.81			0.83			0.83

Across types of household change in the 1996 panel, the ratio of annual measures to four-month measures is, on average, 0.83. Yet only for father exits is the ratio of the annual measure to the four-month measure above 0.90. The annual measure misses approximately a quarter of the exposure to other relatives and nonrelatives joining the household captured by the four-month measure (with a ratio of annual to four-month measure of approximately 0.75).

Overall, the ratio of the annual measures to their respective four-month measures in the 2008 panel is 0.83. In the 2008 panel, the annual measure of fathers leaving the household is a closer match to the four-month measure than the other categories of change, especially the indicator for a nonrelative joining the household, for which the ratio of the annual measure to the four-month measure is only 0.78.

My comparison between the four-month measure and the annual measure of children's exposure to household change shows that the annual measure misses a substantial proportion of the children who are exposed to various types of changes in household composition. This suggests that some of the changes in household composition that children experience are temporary. Shorter durations within or outside of the children's households are captured by the four-month measure but missed by the annual measure. To the extent that it is disruption that is consequential to children's well-being, the four-month measure does a better job of accounting for all of the disruption children experience from changes in the people with whom they live. Surveys with more frequent data collection are more expensive to administer and place a greater burden on respondents, but they provide information that surveys in which more time elapses between waves are unable to provide.

Discussion

Demographers have documented changes in marriage, divorce, childbearing, and cohabitation occurring over the last 30 years, the same period covered by my analysis of children's exposure to household change. Most of the change documented has focused on unions and nuclear family arrangements—later age at marriage, more marriages preceded by cohabitation, more instability in cohabiting unions, and stable overall divorce rates (Guzzo 2014; Kennedy and Ruggles 2014; Kreider and Ellis 2011)—whereas my findings center on the role that nonparent, nonsibling relatives play in household composition and change. The results presented above support the argument that research on family complexity and instability should take a more holistic view of family instability by incorporating measures of household transitions beyond parents and their romantic partners. The cumulative percentage of children exposed to gaining or losing a household member is much higher than the cumulative percentage of children whose father or mother enters or leaves the household. A substantial proportion of children experience the entry of cousins, aunts, uncles, and grandparents into their households, even over a relatively short time period. These changes are rarely fully accounted for in research on family instability even though extended family and nonrelative coresidence and transitions are associated with child cognitive outcomes and other measures of well-being (Chase-Lansdale et al. 1994; Mollborn et al. 2012; Mutchler and Baker 2009). Coresident relatives and nonrelatives may contribute resources to a child's household or may detract from parental resources and attention available to children, and the disruption of the change itself may matter for children's well-being.

Differences by Subgroup

My results further show that children's exposure to changes in household composition differs across racial and ethnic groups and family structure. Although there is little difference by race and ethnicity in children's experience of parental figures entering and exiting the household, a greater share of black and Hispanic children than white children experience the entry or exit of a nonparent, nonsibling relative from their household. Thus, research looking only at changes in parents and their romantic partners may not uncover differences among white, black, and Hispanic children that a broader conceptualization of household instability would reveal. These differences in the quantity and quality of household change could potentially explain differences in the effects of household instability on children's outcomes by race and ethnicity.

Children who live with one parent or no parents are disproportionately exposed to changes in household composition compared with children who live with two parents. This finding is consistent with research that documents the higher levels of family instability among children born to unmarried mothers (Aquilino 1996; Beck et al. 2010; McLanahan 2011), though much of this research focuses on changes in parental figures and mothers' relationship partners. I show that the instability in these households extends to other relatives as well. Children who start out in households conventionally viewed as disadvantaged—those with only one parent or no parents present—are disproportionately exposed to changes in household

composition compared with children who start out in more advantaged households. To the extent that these changes have negative consequences for children's outcomes or other measures of well-being, it will be important to consider them as yet another dimension of disadvantage for children already at risk of worse outcomes.

Trends over Time

Overall, fewer children in the 1990s and 2000s than in the 1980s were exposed to changes in household composition. This may seem inconsistent with the overall trends of later age at marriage, increased cohabitation, and stable divorce rates documented by demographers, yet a narrow focus on households with children and those likely to have children shows more stability. Cohabiting parents have more stable unions now than in the past (Musick and Michelmore 2015), and divorce rates are declining among younger couples compared with older couples (Kennedy and Ruggles 2014).

My aggregate finding of less instability, however, may mask divergent trends for different subgroups. For children starting with single parents and among black children in general, trends are toward greater household stability: in particular, lower exposure to exits or entrances by nonparent, nonsibling relatives. This finding could reflect an increasing preference among single-parent families for living alone with one's children rather than relying on extended family, multigenerational, and doubled-up household formats for support (Edin and Kefalas 2005; Harvey 2015), but more research is needed to test this hypothesis. Fewer changes among household members may be beneficial for children in these groups who, on average, face greater disadvantages in many domains than children living with two parents and white children. My descriptive statistics do not show dramatic changes over time in the proportion of the sample living in two-parent, single-parent and no-parent households, yet future research should simultaneously account for changing rates and changing composition to explain or decompose the aggregate and subgroup trends I observe here.

Limitations

This study is not without limitations. For the majority of my analyses, I determine household relationships using the variable indicating every household member's relationship to the household reference person (typically the head of household). This variable is available in every wave of every SIPP panel and is coded consistently across panels. As a result, my relationship assignment is somewhat coarse. For example, if the variable indicates that the focal child is the child of the reference person and there is a household member who is an other relative of the household reference person, I assign this other relative as an other relative of the child. For some analyses it may be useful to know the precise relationship of this person to the child (perhaps a grandparent, aunt, uncle, or cousin), but it is not always possible to make that determination without more detail. To examine these other relative relationships in more detail, for my description of the extended family members who live with children, I used the household relationships section of the SIPP topical modules, which provide the relationship of every person in the household to every

other person in the household. These detailed household relationships, however, are available at only one wave of every panel and are insufficient for documenting relationships in households across waves, especially given my interest in identifying the relationship of the individuals entering and exiting the household, who may not be present during the wave at which the relationship matrix is administered.

This analysis does not account for the entry and exit of children's siblings, stepsiblings, and half-siblings into and out of their households. Supplemental analyses based on the age of siblings entering and leaving children's households reveal that over two years, nine percent of children experience the addition of a sibling younger than age one to their household, and 3.5 percent experience the departure of a sibling age 17 or older. Less than two percent of children experience a change in a sibling ages one to 16, the type of change more likely to be associated with stepsiblings. Recent research on family complexity has focused on stepsiblings and half-siblings as a source of complexity and documents that this type of family complexity is concentrated among the most disadvantaged families (Manning, Brown, and Stykes 2014). Sibling complexity could be an important source of household instability for children in addition to the types of changes I focus on here, and a more complete characterization of the household changes to which children are exposed would include all individuals entering and exiting children's homes, regardless of their age or relation to the child.

Attrition from the SIPP is not a trivial issue. Across the seven panels, between 19 percent and 38 percent of the children who appear in the survey in wave 1 are no longer in the survey by wave 6. The more recent panels of the SIPP have lower retention rates than the earlier panels, but there is not a monotonic trend in my sample. These attrition rates could affect the findings I present in this article if household change is related to attrition and the longitudinal panel weight I employ does not effectively adjust for attrition. Households that are not interviewed at all waves of the survey may be less stable than households that remain in the survey through six waves. I have some evidence of this, as experiencing household change between waves 1 and 2 is significantly associated with attrition by wave 6 (although household change is not differentially associated with attrition across panels). Further, we know that children whose households remain in the survey but who themselves are not present in all six waves experience changes in household composition because they leave the household members with whom they lived when they were surveyed and presumably join a different household with new members. This type of attrition—children only—is relatively rare in my sample. Across panels, more than 93 percent of the children who leave the survey by wave 6 are part of households that leave the survey. Acknowledging that a small proportion of attrition necessarily involves household change means that changes in household composition affect a larger share of children than is represented in my cumulative percentage figures (Appendix C in the online supplement provides a table comparing the percentage of children in each panel exposed to at least one change by wave 6 with the percentage of children observed to experience a change plus the children who left the survey but whose households remained).

The much larger share of attrition attributable to household nonresponse could affect my conclusion that fewer children in more recent cohorts experience changes

in household composition involving other relatives if the higher rates of attrition mean that my estimates of exposure to changes involving other relatives in later panels are artificially low. It is unlikely, however, that high attrition rates in general and differential attrition rates across panels affect my main argument that many children are exposed to changes in household composition not captured by traditional measures of changes involving parents and their romantic partners.

Conclusions

In conclusion, the finding that a substantial proportion of children experience nonparental changes in household composition and that nonwhite children and children starting in single-parent and no-parent households are disproportionately exposed to these changes should stimulate further research on the consequences of these changes for child development and well-being. My comparison of the four-month and annual measures of household composition and change suggests that future research using surveys with annual or less frequent recording of household composition may miss some of the household changes to which children are exposed. Future research should seek to determine the consequences of short- and long-term household changes, acknowledging that the frequency at which household rosters are documented may limit the detail and precision of any measure of disruption. Family complexity and instability is an important area of research that has received much recent attention. My results show what is missed when research uses a narrow definition of family instability that does not include other individuals present in children's households. This broader definition also shifts the focus from family instability to household instability, which better captures the changes in developmental environments to which children are exposed.

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