

The Fragile Families and Child Wellbeing Study changed its name to The Future of Families and Child Wellbeing Study (FFCWS). Due to the issue date of this document, FFCWS will be referenced by its former name. Any further reference to FFCWS should kindly observe this name change.

Family Instability from Birth to Adolescence: Evidence from a Birth Cohort Study

Sarah Gold
Princeton University

Brandon Wagner
Texas Tech University

Sara McLanahan
Princeton University

Jeanne Brooks-Gunn
Columbia University

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Abstract

Background: Family structure instability is associated with a host of negative outcomes for children, but there is limited knowledge of the prevalence of this instability in recent cohorts.

Objectives/Methods: This research note draws on six waves of data from the Fragile Families and Child Wellbeing Study to provide national estimates of children's exposure to family structure instability (both moves in and out) for a cohort born in large US cities at the turn of the 21st century. **Results:** We find that by age 15, the average child in this cohort experienced about one and a half co-residential changes in family structure. The number of transitions differs by parents' relationship status and mothers' education at birth. Children born to married parents experienced the fewest transitions (0.89) while children born to single mothers experienced the greatest number of transitions (average of 3.00). Additionally, children whose mothers had completed college prior to the child's birth experienced fewer transitions than children whose mothers had less education. **Contribution:** We extend existing literature by examining cumulative instability (and subgroup differences) through age 15, an important developmental period.

Keywords: Marriage and Close Relationships, Stability, Fragile Families and Child Wellbeing

A large body of research shows that family structure instability is broadly associated with negative outcomes for children, including behavior problems (Fomby and Cherlin 2007; Osborne, Manning and Smock 2007; Osborne and McLanahan 2007), poor academic performance (Heard 2007; Marcynyszyn, Evans and Eckenrode 2008; Sun and Li 2009), lower educational attainment (e.g., Lee and McLanahan 2015), early onset of sexual behavior and premarital childbearing (Fomby, Mollborn and Sennott 2010; Wu 1996; Wu and Martinson 1993; Wu and Thomson 2001), and poor health (e.g., Hernandez et al. 2014). Despite the importance of family structure instability, detailed descriptions through adolescence in recent cohorts of children are lacking. We extend existing literature by examining cumulative instability (and subgroup differences) through age 15, an important developmental period.

LITERATURE REVIEW

Much of the existing literature focuses on parental relationship instability as a predictor of other child- and family-level outcomes (Cooper et al. 2009; Fomby and Cherlin 2007; Lee and McLanahan 2015; Meadows, McLanahan and Brooks-Gunn 2008; Osborne, Berger and Magnuson 2012). While these studies do not estimate children's exposure to family instability during childhood, they do suggest relationship dissolution is negatively associated with child- and family-level indicators such as health and parenting.

Several studies have predicted family structure instability, particularly the dissolution of the parent's relationships. This research has found children's experience of instability varies by the structure of the relationship (Osborne et al. 2007), parent's characteristics (e.g., age, race, and education; Raley and Bumpass 2003; Sweeney and Phillips 2004), and relationship factors like

closeness (Le et al. 2010). Instability may also come from other household members like siblings, relatives, and non-relatives (e.g., Perkins 2017; Raley et al. 2019).

Several studies have used earlier waves of Fragile Families and Child Wellbeing (Fragile Families) data to examine family structure transitions. Osborne and McLanahan (2007) examined mothers' partnership changes – both residential and non-residential – through age 3 and found that children born to minority and unmarried parents experienced more transitions than those born to white or married parents. However, these results do not account for transitions that occurred between waves 1 and 3, underestimating instability. Similarly, Osborne et al. (2007) established that children born to cohabiting parents are at greater risk of experiencing parents' separation by age 3 than children born to married parents with differences by race and ethnicity: whites have larger gaps in union stability between married and cohabiting parents than do black or Mexican American children. Lee and McLanahan (2015) counted transitions between ages 3 and 5 and 5 and 9, though they did not aggregate these transitions over time.

To our knowledge, only one study has examined maternal relationship trajectories over the course of childhood. Using retrospective data from the 1995 and 2006-2010 waves of the National Survey of Family Growth, Brown, Stykes and Manning (2016) examined trends in family instability through age 12. They found children born to single mothers in the later cohort experienced more transitions than children born to single mothers in the earlier cohort (1.01 compared to 0.89), while transitions experienced by children born to cohabiting parents remained stable. Though white and Hispanic children experienced similar levels of instability across this period, black children saw an increase.

We extend existing research in three ways. Whereas relying on retrospective family histories may underestimate children's exposure to cohabiting relationships (Hayford and

Morgan 2008), Fragile Families data allow us to collect data at multiple times through childhood and adolescence. Additionally, because respondents report on coresidential partnerships between waves in the most recent three waves of Fragile Families, we capture relationships otherwise missed if we used household rosters at the time of survey administration. Second, though prior work has shown that socioeconomic status is associated with increased likelihood of divorce (Conger, Conger and Martin 2010), we examine all coresidential transitions, including entries and exits, by level of maternal education, using data from a more contemporary birth cohort. Because Fragile Families oversamples nonmarital births, we have rich data on a variety of relationship trajectories experienced by contemporary families. Finally, we report exposure to instability not only during early and middle childhood but also into early adolescence. Family instability experienced in this period may influence subsequent behaviors, such as delinquent behavior (Fomby et al. 2010), so understanding the level of relationship instability during this time period is of particular importance.

Using six waves of Fragile Families data, we provide population estimates of family structure trajectories from birth to age 15 for children born in large US cities between 1998 and 2000. We estimate cumulative relationship instability over time and by mothers' baseline relationship status and education.

METHODS

Data

Fragile Families follows a birth cohort of nearly 5,000 children born in large U.S. cities between 1998 and 2000, The study design called for an oversample of births to unmarried parents, enabling us to estimate trajectories for children born to cohabiting and single parents with precision. Data were collected from mothers at the child's birth and again when the child

was approximately one, three, five, nine and fifteen years old. Survey response rates for all births in the baseline were 89% (age 1), 86% (age 3), 85% (age 5), 77% (age 9), and 73% (age 15). When weighted, the data are representative of all births in large US cities between 1998 and 2000, which account for nearly 30% of all births during this period (authors' calculation; Martin et al. 2017). The weighted national sample includes 3,442 births (this excludes several cities not selected at random). These survey weights adjust for several maternal baseline factors including marital status, education, race/ethnicity, and age.

Sample

Our sample includes children whose mothers reported their relationship status at each wave, or whose relationship status could be determined using information given at subsequent waves. For example, if a mother did not report her relationship status at the age 9 interview but reported at the age 15 interview that she had begun living with her current partner prior to the age 9 interviews, we coded that information into the age 9 relationship status variable. To be representative of the sampled population, we limited our sample to children with national weights (3,442 at baseline). At the age 15 interview, 2,262 mothers with national weights were interviewed. Of these mothers, 205 were missing data that could not be determined with relationship calendars from other waves, leaving an analytic sample of 2,057 children. Our analytic sample is largely similar to the national sample at baseline, though it slightly underrepresents children born to less educated, single, and immigrant mothers (Online Appendix A).

Measures

Cohabitation Transitions.

The measurement of mothers' coresidential relationship transitions varies by survey wave. At ages 1 and 3 (waves 2 and 3), mothers were asked if they were living with the focal child's biological father or a new partner. At ages 5, 9, and 15 (waves 4 through 6), mothers were asked if they were living with the focal child's biological father, and, if not, how many partners they had lived with since the prior wave. Thus, for ages 1 and 3, we are able to count up to two possible transitions (a move out and a move in), while for ages 5, 9 and 15, we are able to count all coresidential transitions. We also distinguish between entries into and exits from coresidential relationships.

Parents' Relationship Status.

The parents' relationship status at the time of the focal child's birth was reported by the mother. For these analyses, we identify three categories: married, cohabiting, and single, which includes mothers who reported being in a romantic (but non-coresidential) relationship with the child's biological father, mothers who reported being friends with the father, and mothers who report no relationship with the father.

Mother's Educational Attainment.

Mother's educational attainment at birth was reported by the mother at the baseline interview. For these analyses, we code mother's education as less than or equal to high school degree, some college, and college degree or more. Because there is no difference in family stability among the less than high school and high school groups, we collapse them into a single category.

Analytic Strategy

We first present the cumulative number of transitions (and entries and exits) for the full sample, by parents' relationship status at baseline, and by mother's educational attainment at

baseline. We run bivariate regression models predicting differences between categories. Next, we examine the average number of transitions at each wave along with differences by mothers' educational and relationship status at the focal child's birth. All results are weighted using national weights.

RESULTS

Cumulative Transitions and Differences by Maternal Characteristics

Table 1 presents cumulative transitions for the full sample and stratified by the mother's relationship status or educational attainment at the child's birth. This cohort experienced an average of 1.56 transitions between birth and age 15. About half experienced no transition, 12% experienced one transition, 14% experienced two transitions, and 7% three transitions. These estimates are conservative because we cannot count partnership changes where both entry and exit occurred *between* birth and age 3. Counts of transitions varied by parents' relationship at birth; only 33% of children born to married parents experienced a transition compared to 70% of children born to cohabiting parents and 86% of children born to a single mother. The average number of transitions across these groups differs: less than 1 (0.89) for children born to married parents, over 2 (2.43) for those born to cohabiting parents, and 3 (3.00) for those born to single mothers. Among children born to single mothers, over half experienced two or fewer transitions by age 15. Relationship dissolution is more common than relationship entry among all groups other than children born to single mothers.

Children's exposure to instability also varies by mother's education. Children born to more educated mothers had significantly fewer transitions than those born to less educated mothers. Children whose mothers had a high school diploma or less had an average of 2.06

transitions compared to 1.27 for those with some college and 0.71 for those with a college degree.

Table 1: Number of Transitions, baseline through year 15 (n=2,057)

	Full Sample	Parents' Relationship (Baseline)			Mother's Educational Attainment (Baseline)		
		Married	Cohabiting	Single	<=HS or GED	Some College	College
Number of Transitions							
0	50.08	66.18	30.36	13.70	37.64	53.81	73.20
1	11.64	8.71	13.80	19.82	12.81	12.84	8.34
2	13.56	11.36	16.03	18.76	16.70	15.65	5.45
3	7.17	4.15	11.16	13.69	7.38	7.66	6.40
4	7.57	6.16	9.77	10.28	10.36	3.27	5.30
5	4.04	1.66	8.59	7.65	6.89	1.60	0.13
6	2.04	0.50	2.53	7.04	2.48	2.41	0.19
7	1.46	0.94	2.65	2.02	2.20	1.37	0.00
8+	2.43	0.34	5.12	7.04	3.55	1.39	0.98
Mean Transitions (SE)	1.56 (0.08)	0.89 (0.11)	2.43 (0.22)	3.00 (0.19)	2.06 (0.14)	1.27 (0.20)	0.71 (0.19)
Mean Entries (SE)	0.70 (0.03)	0.34 (0.05)	0.98 (0.09)	1.66 (0.09)	0.97 (0.06)	0.55 (0.09)	0.24 (0.07)
Mean Exits (SE)	0.85 (0.05)	0.54 (0.07)	1.44 (0.12)	1.32 (0.10)	1.08 (0.09)	0.71 (0.11)	0.47 (0.13)

Note: Weighted using nationally representative weights; Number of entries and exits may not add up to number of transitions due to rounding

Cumulative Transitions over Time

Next, we examine cumulative transitions from birth to adolescence. Figure 1 shows the number of cumulative transitions children experience by each wave's interview. By age 15, children had experienced about one and a half maternal residential partner transitions, on average. The cumulative number of entries and exits are similar at each age.

Figure 1: Cumulative transitions experienced at each wave

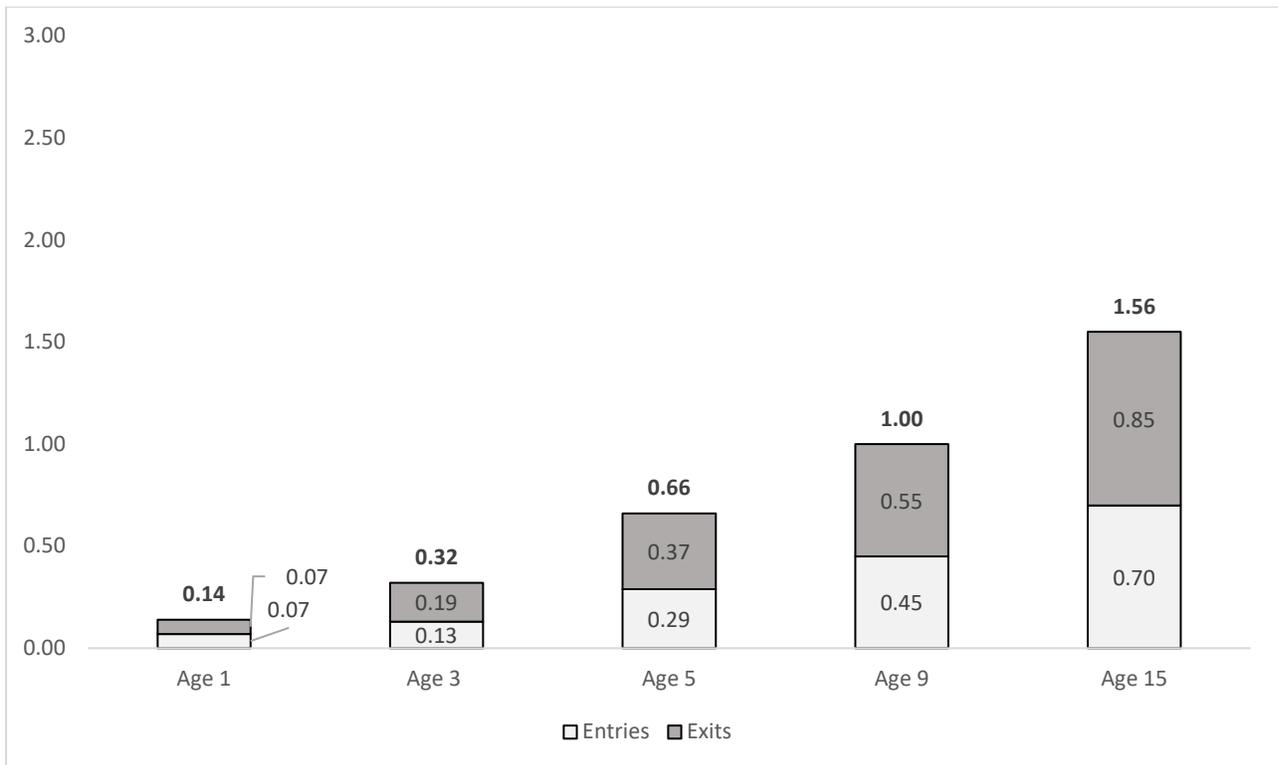


Figure 2 shows cumulative transitions by the parents' relationship at baseline divided into the number of entries and exits. The mean cumulative transitions for children born to cohabiting and single parents are significantly different from those experienced by children born to married parents ($p < 0.05$). Children born to cohabiting and single parent experience a significantly higher number of transitions than children born to married parents. By age 15, children born to married parents have experienced 0.89 transitions while children born to single parents have experienced

more than three times as many (3.00) and those born to cohabiting parents have experienced 2.43 transitions.

Figure 2: Cumulative transitions by parents' relationship at baseline (ref=married; * p<0.05)

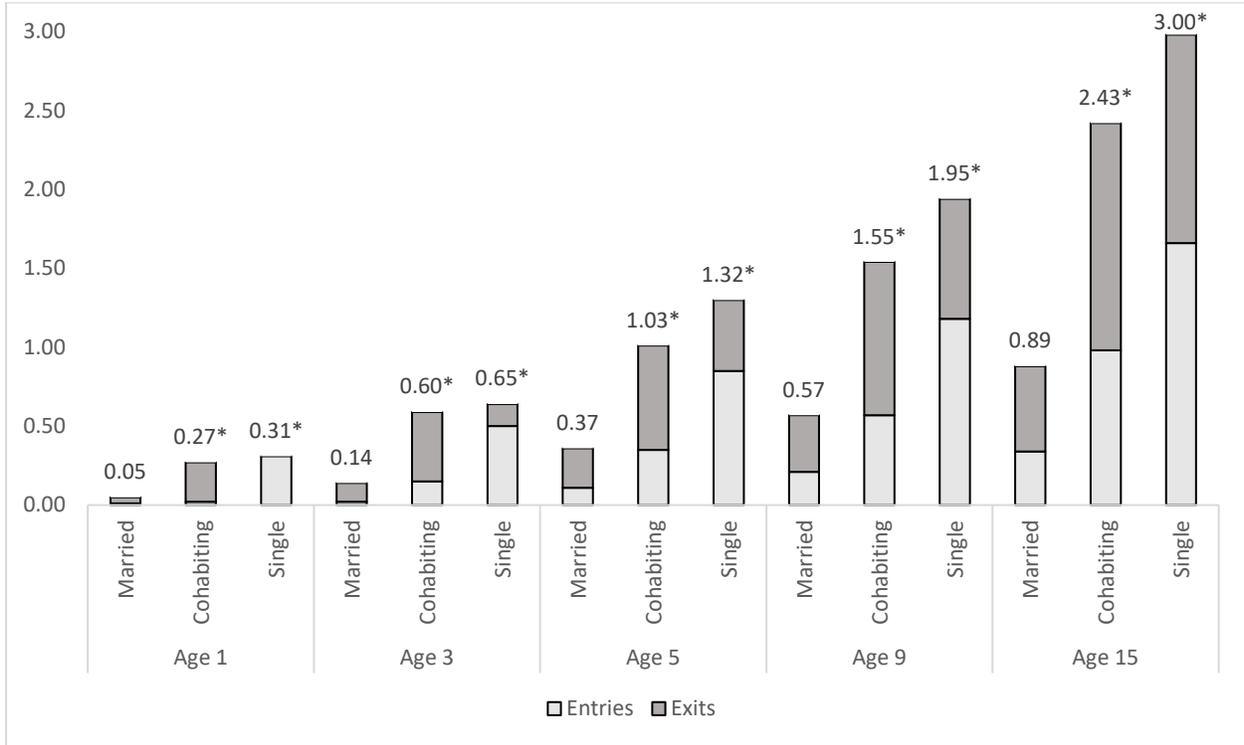
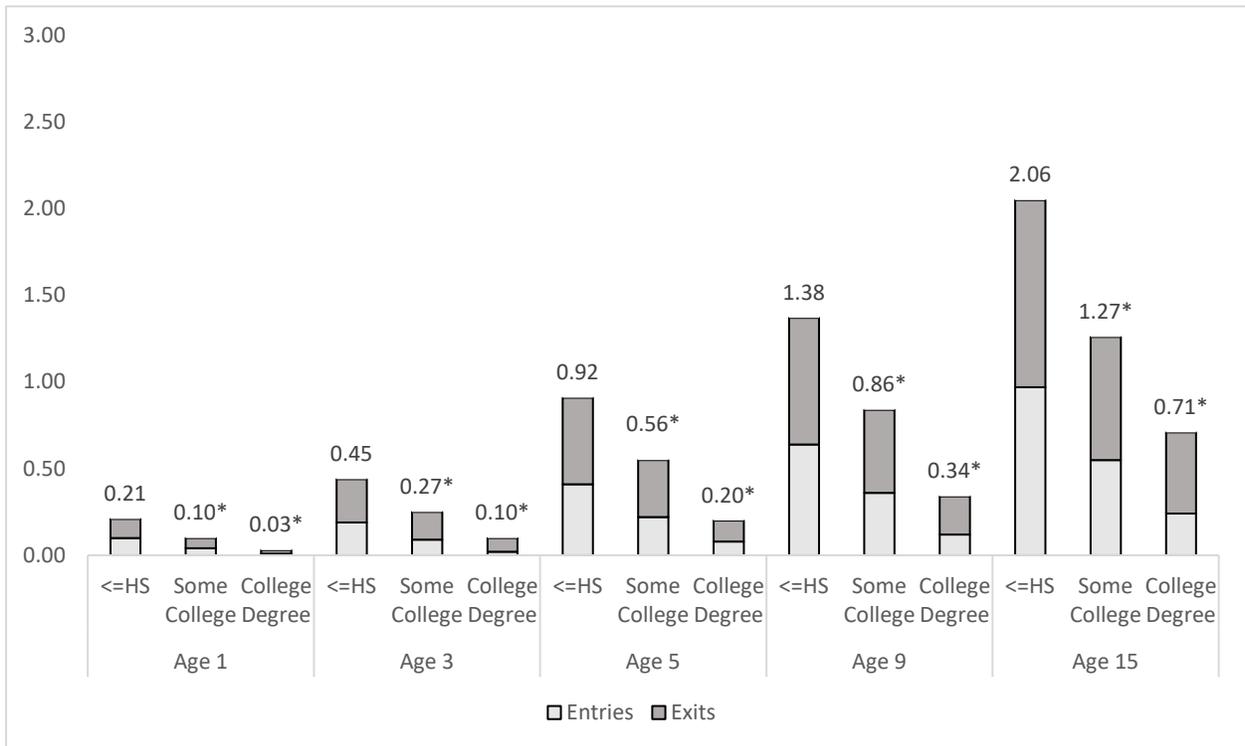


Figure 3 shows the cumulative transitions at each year by the mother's educational attainment at baseline. At all waves, children whose mother had a college degree at baseline experienced significantly fewer transitions than children born to mothers with a high school diploma or less. At ages 1 and 15, children whose mothers had some college had significantly fewer transitions than those born to mothers with a high school diploma or less. By age 15, children whose mothers had at most a high school diploma experienced an average of 2.06 transitions compared to 1.27 among children whose mothers had completed some college, and 0.71 among children whose mothers had a college degree.

Figure 3: Cumulative transitions by mother's educational attainment at baseline (ref= \leq HS; * $p < 0.05$)



CONCLUSION

These descriptive results provide information about the family structure instability experienced by children in a recent birth cohort, extending existing literature by examining changes in a more recent cohort through adolescence. Transitions among this cohort are common, though experiences differ dramatically by parents' relationship at baseline and the mother's educational attainment. Our results are generalizable to births in large US cities between 1998 and 2000 making them particularly useful for understanding the childhood experiences of these youth, who comprise about 30% of all US-born youth during this period.

Our current analyses have several limitations. First, our analyses are limited in that, when calculating between wave coresidential transitions, they measure only the number of transitions with new partners, not turbulence within a single partnership. We are therefore undercounting

some of the actual instability experienced by these adolescents. There is also the possibility that we undercount transitions at ages 1 and 3 because mothers were not asked about the number of residential relationships they had since the prior survey wave. Though this limitation is concerning, the time periods between these waves are shorter (one year between baseline and age 1 and two years between ages 1 and 3) so undercounting is likely not as severe as it would have been between later waves (with longer gaps between them). Lastly, differential attrition is a concern because mothers experiencing the most instability may be more likely to drop out of the study over time. We address this concern by using sample weights which account for the portion of the sample lost to non-response (Kennedy and Gelman n.d.). Additionally, comparisons of our analytic sample to the baseline sample (presented in Appendix A) indicates that the samples are quite similar.

Children whose parents were not married at birth are more likely to experience a transition than a child whose parents were married at birth. The experience of parental relationship instability is also stratified by socioeconomic status; children with highly educated mothers experience fewer transitions through adolescence than do those with less educated mothers. These findings call attention to a need for additional focus on the contexts of instability and pathways to stable singlehood or relationships.

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Appendix A: Weighted Sample Characteristics for National Sample

	% or mean	
	Baseline Sample	Analytic Sample
Mother's Baseline Characteristics		
Education		
<=HS or GED	58.58	53.49
Some College	18.97	20.71
College Degree	22.44	25.80
Mother not born in the United States	24.53	21.95
Race		
Non-Hispanic White	38.17	39.78
Non-Hispanic Black	22.60	22.35
Hispanic	31.34	29.28
Other	7.90	8.59
Age	27.07	27.48
Child was mother's first born	39.24	39.93
Relationship with child's father		
Married	60.18	63.28
Cohabiting	19.81	19.03
Single	20.01	17.69

Note: Descriptive characteristics are presented using national weights from corresponding survey wave.