PERSPECTIVES ON
OPPORTUNITY

Dynamics of Families After a Nonmarital Birth

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Despite known links between poverty rates and unmarried parenthood, we know little about how changes in family situations after a nonmarital birth affect poverty. This study explores Future of Families and Child Wellbeing Study data to document changes to the relationship status, employment status, and education level of a cohort of unmarried mothers who gave birth in urban areas in the late 1990s and the implications for poverty rates over a 15-year follow-up period. For children born to unmarried parents in urban areas, official poverty rates improved modestly in the 15 years after the birth, with maternal employment, education gains, and marriage corresponding to lower poverty rates on average over time. Using the success sequence as a framework, poverty rates were dramatically (and statistically) lower when mothers who were unmarried at the time of childbirth subsequently married, worked full-time, and had at least a high school education, suggesting the achievement of success-sequence milestones can lead to lower child poverty even after the birth of a child outside marriage.

In the 1990s, researchers at Princeton University and Columbia University initiated the Future of Families and Child Wellbeing Study, referred to in this report as the Future of Families Study,[1] to provide insights into a poorly understood demographic group—unmarried parents and their children (Reichman et al. 2001). A significant surge in nonmarital childbearing in the prior decades increased interest in unmarried families, with births to unmarried parents increasing from 5 percent of total births in 1960 to 31 percent by 1993 (CDC 1995). Equally concerning was that children living with a single parent had poverty rates five times the rates for children in married families (Shrider and Creamer 2023).

The rate of nonmarital births continued its upward trend post-1993, and although the rise has plateaued in recent years, almost 40 percent of children are currently born to unmarried parents (Stone 2018; Osterman et al. 2023). These children remain at a considerably higher risk of poverty compared to those born into married families.

Public policies have sought to assist low-income families by offering financial support, with federal expenditures on means-tested programs doubling in real dollars since the late 1990s (Rachidi, Weidinger, and Winship 2022). However, questions remain over the extent to which safety-net policies help low-income families achieve self-sufficiency versus simply helping them tolerate poverty better. These unanswered questions underscore the need for a deeper understanding of the specific circumstances of unmarried families over

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1 In January 2023, the study was renamed from the Fragile Families and Child Wellbeing Study to the the Future of Families and Child Wellbeing Study.

time and the implications for them escaping poverty and achieving upward mobility.

This report leverages longitudinal Future of Families Study data to gain a better understanding of families' dynamics after a nonmarital birth by exploring changes to maternal relationship status, employment status, education level, and official poverty rates over a 15-year follow-up period. The Future of Families Study contains a representative sample of nonmarital births between 1998 and 2000 in urban hospitals (cities with populations over 200,000 in 1994), offering a robust dataset on the family dynamics of a cohort of unmarried families from childbirth through the child reaching age 15 (Future of Families and Child Wellbeing Study n.d.a.).

My focus on three factors—education, employment, and relationship status—stems from a desire to understand how these crucial correlates of poverty evolve after a nonmarital birth and the implications for families' escape from poverty. These factors are at the core of the success sequence, a finding in the social sciences showing that those who graduate high school, work full-time, and marry before having children are far more likely to avoid poverty in adulthood (Institute for Family Studies n.d.).

Researchers have consistently demonstrated the effectiveness of those who follow the success sequence in averting poverty, with youth organizations recommending it as a means for young people to avoid poverty as adults (Inanc, Spitzer, and Goesling 2021; Goesling, Inanc, and Rachidi 2020; Institute for Family Studies n.d.). However, it seems plausible that at any point in time, achieving the success-sequence milestones could improve prospects for families even when not followed sequentially. For example, unmarried mothers—this study's sample of interest—by definition did not follow the success sequence because they had a child outside of marriage, but it remains useful to understand the implications of improving their education, full-time work status, and rates of marriage as a potential poverty-reduction strategy for them and their children over time.

Answering these questions also has implications for the current policy debate over ways to reduce US poverty. By most accounts, US child poverty rates have declined markedly since the start of the War on Poverty in 1964 (Burkhauser et al. 2021). However, much of the decline in poverty rates has come from increases in government transfers, which are costly and likely unsustainable as a strategy to reduce poverty even further given the federal government's fiscal situation (Burkhauser et al. 2021). Moreover, even though child poverty rates have fallen, increasing upward mobility has been more challenging, leading to concerns that many government transfer programs improve immediate material conditions for low-income families but fail to address the underlying drivers of poverty and limited upward mobility (Winship et al. 2021). In the end, government transfer programs that reduce employment and discourage marriage might diminish the likelihood of self-reliance, escalating the need for even more government assistance as time goes by.

Leveraging longitudinal data from the Future of Families Study, I found that the majority of children born to unmarried parents (almost 80 percent) experienced poverty (defined using the official poverty measure) at some point in their first 15 years.[2] (For comparison, only 30 percent of children born to married families in the Future of Families Study experienced poverty in their first 15 years.) Even so, the overall average poverty rate for unmarried families declined modestly in each survey year, and the average poverty rate at the time of the age 15 survey was statistically lower than at the age 1 survey.

Further, the data suggest that when the group of mothers who were unmarried at childbirth later transitioned into marriage, more employment, or a higher level of education between survey years, they experienced lower poverty rates on average. Conversely, when mothers transitioned away from marriage or full-time employment, they experienced higher poverty rates on average.

The findings also show that mothers who were unmarried at childbirth who achieved all three success-sequence milestones at the time of the age 15 survey—marriage, full-time employment, and a high school education—had substantially lower poverty rates on average (9 percent) than did those who achieved none of these milestones (78 percent). Also notable, the majority of mothers who were unmarried at childbirth had at least a high school education (75 percent) and worked full-time in the previous year (53 percent) at the time of

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2   All the statistics presented in this report used the Future of Families national weight to represent unmarried births in large US cities (77 cities with populations over 200,000 in 1994) between 1998 and 2000. See Future of Families and Child Wellbeing Study (n.d.c.).

the age 15 survey, but only 30 percent were married. This suggests that marriage as a poverty-reduction strategy might be more challenging to achieve than full-time employment or education. Even so, among the group of mothers who remained unmarried by the age 15 survey, full-time employment and having at least a high school education led to dramatically lower poverty rates compared to mothers who did not achieve both milestones.

In the following sections, I describe trends in poverty rates, relationship status, employment status, and education level for unmarried mothers who gave birth in urban hospitals in 1998–2000. In the first section, I describe the Future of Families Study and the measures I used to assess trends in employment, education, and relationship status across six survey waves (at the time of the birth and when the child was approximately age 1, 3, 5, 9, and 15). I used all available data from the mothers' surveys and applied the surveys' national weights so that the estimates represent all unmarried births that occurred in large US cities (population 200,000 or more) between 1998 and 2000 (Future of Families and Child Wellbeing Study n.d.c.).

In the second section, I show trends in overall official poverty rates for the full cohort of mothers who were unmarried at the time of childbirth. Next, I show trends in relationship status, employment status, and education level for the cohort of mothers unmarried at childbirth across each survey year. Then, I show trends in average poverty rates by subgroup across each survey year separately and together using the success-sequence framework. In the fourth section, I explore changes in average poverty rates based on transitions into marriage, different employment statuses, and maternal education levels across survey years. In the final section, I summarize the conclusions and discuss the implications of the findings.

Data and Measures

The Future of Families Study, a joint effort by researchers at Princeton University and Columbia University, originally surveyed a sample of 4,898 families of children born in 75 hospitals across 16 large cities (populations of 200,000 or more) in the US between 1998 and 2000

(Reichman et al. 2001). The study oversampled nonmarital births, with 3,600 unmarried parents included in the study. To the extent possible, researchers surveyed the mothers and fathers at the time of birth and when the child was approximately age 1, 3, 5, 9, and 15. The dataset includes weights to reflect estimates representative of nonmarital births in public hospitals in large US cities between 1998 and 2000.

Compared to all nonmarital births in the US in 1998, a much larger share of unmarried mothers in the Future of Families sample were African American, with a smaller share being white and Hispanic. Unmarried mothers in the Future of Families sample were also slightly older than all unmarried mothers giving birth in the US were in 1998, and the births represented a first birth for a smaller share of mothers in the Future of Families sample (Reichman et al. 2001).

This report analyzes data on mothers who were unmarried at the time of childbirth. Some of these mothers later married, allowing me to assess changes to average poverty rates based on their relationship status. I analyzed self-reported data on income, employment, education, and relationship status from the mothers' surveys across six waves of data collection, beginning when the mother gave birth and ending when the child was approximately 15 years old.[3]

Official Poverty Rates. First, I explored poverty rates using the official poverty measure for the full cohort of mothers who were unmarried at the time of childbirth. The official poverty measure does not count in-kind government benefits or refundable tax credits when calculating income, and the Future of Families data were insufficient to capture these additional resources.

Incorporating tax-based and in-kind government benefits, such as the earned income tax credit and food stamp benefits, would show lower overall poverty rates and larger reductions in poverty over time than what is reflected by the official poverty rate, because government program participation and benefit levels have both increased. However, using the official poverty rate remains useful because it shows income that came largely from employment or cash-based government assistance,

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3   The age 15 survey was the first year in which researchers only administered the "core" survey to the primary caregiver, not the mother and father. However, 88 percent of primary caregivers on the age 15 survey were the mothers. To be consistent across years, I only included the age 15 surveys for which the mother completed the primary caregiver survey.

such as welfare or disability assistance. Because of this, the analyses largely reflect poverty as it relates to family employment before counting the majority of government transfer income through the tax code or government in-kind assistance.

I also calculated a measure to reflect the persistence of poverty, which was equal to the number of survey waves (starting with the age 1 survey) that families were below the official poverty level. For simplicity, I categorized each family into one of five groups to reflect poverty persistence: zero waves, one wave, two to three waves, and four to five waves.

Relationship Status. At the baseline and age 1 wave, the survey captured the relationship status of the child's biological parents, including whether they were married, in a cohabiting relationship, or unmarried and not living together (whether romantically involved or uninvolved). Starting with the age 3 wave, the survey also asked about relationships between the mother and other adults when no marriage or cohabiting relationship with the biological parent existed. For the age 3 and subsequent waves, I categorized the relationship status of the unmarried mother sample into five groups: (1) single (unmarried and not cohabiting with any other romantic partner), (2) married to the baby's father, (3) married to a new partner, (4) cohabiting with the baby's father, and (5) cohabiting with a new partner.

Because the Future of Families Study is a longitudinal survey, I was able to group families by whether the mothers' relationship status changed after the age 1 survey. I did this to reflect instability the family experienced due to relationship changes, whether in a positive or negative direction. For example, if a mother who was unmarried at the time of childbirth married the biological father of her child between the age 1 and age 5 surveys, she would still be coded as having an inconsistent relationship status, even though that relationship change was positive. (However, less than 20 percent of unmarried biological parents eventually married each other, with most of those marriages happening in the first year.)

I created four categories to reflect the family situation, starting with the age 1 survey through the age 15 survey: married in all, cohabiting in all, single in all, and inconsistent family situation. Notably, a mother who was married or cohabiting in all waves of the survey could have

been in those relationships with different people, which is instability that I did not pick up.

Employment. At each wave, the survey asked mothers how many weeks in the past 12 months they worked and how many hours they usually worked per week. I categorized mothers who reported working at least 50 weeks and 30 hours or more per week as full-time, full year. I categorized those who reported working less than that as part-time or part year and mothers who reported not working at all as having no employment.

I also grouped families by whether the mother reported a different employment status in the prior year at the time of each survey wave. I did this to reflect employment instability across survey waves. I created three categories to reflect maternal employment across waves starting with the age 1 survey through the age 15 survey: (1) employed in all (full-time or part-time or part year), (2) not employed in any survey waves, and (3) inconsistent employment (reported employment on some survey waves and no employment on some survey waves). I did not categorize periods of temporary unemployment as not employed unless it covered the entire 12 months before the survey.

Education Level. The survey asked mothers about their level of formal education at the time of three survey waves: the baseline survey (the time of the birth), the age 9 survey, and the age 15 survey. I categorized mothers into three groups: less than a high school education, a high school education only, and some college (including technical school) or more.

Success Sequence. The success sequence suggests that completing high school, working full-time, and getting married before having children is a highly effective way to avoid poverty (Inanc, Spitzer, and Goesling 2021). Although the success sequence implies that reaching these milestones in order is important, it also serves as a framework for understanding factors that correlate to poverty at any point in time. As reported on the baseline and age 15 surveys, I calculated the number of success-sequence milestones achieved (including the consideration of marriage after the nonmarital birth of a child as a milestone) for each mother and calculated poverty rates based on milestones achieved. This allowed

me to consider the point-in-time implications for poverty of marriage, employment, and education together even after a nonmarital birth.

Transitions. Leveraging the longitudinal nature of the data, I was also able to group mothers who were unmarried at childbirth into transition groups based on changes between survey years in relationship status, employment status, and education level. This allowed me to assess changes in average poverty rates for each transition group while controlling for time-invariant factors, such as age at the time of childbirth, race and ethnicity, and unobservable factors.

Relationship Status. I first grouped the cohort of mothers unmarried at childbirth into two categories depending on the mother's relationship status at the age 1 survey compared to the age 5 survey: (1) unmarried (single or cohabiting) to married and (2) unmarried (single or cohabiting) at both survey waves. I regrouped mothers unmarried at childbirth into the two categories depending on relationship status transitions between the age 1 and age 15 surveys. I calculated the average official poverty rate for each transition group and assessed changes between survey waves.

Employment Level. To assess transitions between the age 1 and age 5 surveys, I categorized mothers unmarried at childbirth into four employment transition groups: (1) less than full-time employment at both, (2) less than full-time employment to full-time employment, (3) full-time employment at both, and (4) full-time employment to less than full-time employment. To compare trends between the age 1 and age 15 surveys, I regrouped the original group of mothers unmarried at childbirth into the same categories based on their employment status between surveys.

Education Level. Because the question about maternal education level was asked only in the baseline, age 9, and age 15 surveys, I categorized mothers unmarried at childbirth into three transition groups to reflect education level changes between the time of the birth and the age 15 survey: (1) less than high school at both, (2) less than high school to high school or more, and (3) high school or more at both.

## Trends in Poverty, Family Situation, Employment, and Education

The following sections summarize trends in official poverty rates, relationship status, employment status, and education level of the mother.

Trends in Official Poverty Rates. Half or more of children born to unmarried parents in the Future of Families Study were poor at each survey between age 1 and age 5 according to the official poverty rate, with approximately one-quarter experiencing deep poverty—that is, 50 percent or less than the federal poverty level (FPL). However, as children born to unmarried parents entered school age, average poverty rates started to decline. The decrease in average poverty rates between the age 1 and age 15 surveys was statistically significant, even though 40 percent of children born to unmarried parents were still officially poor at age 15, while 28 percent had income above 200 percent of the FPL (Figure 1).

The same children were not poor across all surveys; however, most children born to unmarried parents experienced poverty at some point. As shown in Figure 2, just under 30 percent spent most survey years in poverty (at least four of five survey waves from age 1 to age 15), while 21 percent spent no survey years in poverty. The remaining 49 percent spent between one and three survey years in poverty, meaning at least 80 percent of children born to unmarried parents in the Future of Families Study experienced poverty at some point in their youth.

Parental Relationship Status. Examining the family situation over time offers insight into the poverty levels among children in the Future of Families Study. Notably, a significant number of children born to unmarried parents experienced changes in their family circumstances throughout the survey years. As shown in Figure 3, many unmarried mothers reported romantic relationships with the biological father at the time of the birth, with approximately half living together (cohabiting) and the remaining half living apart. However, relationships between biological parents broke down over time, with 76 percent of originally unmarried parents not living together by the time the child was age 15. In contrast, a small share of unmarried parents at birth went on to marry each other, between 10 and 18 percent at the time of each survey year.

**Figure 1. Poverty Rates by Survey Year for Families with Parents Unmarried at the Time of Childbirth**
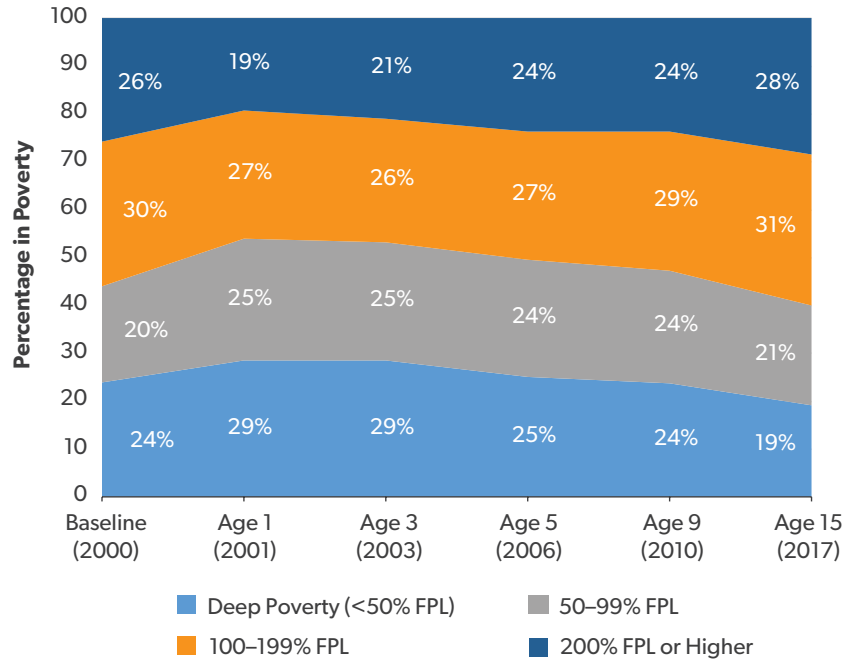
Note: The difference in the poverty rates at the age 1 survey (54 percent) compared to the age 15 survey (40 percent) was statistically significant at the 0.05 level. Data are weighted to reflect births in large US cities.
Source: Waves 1–6 in the Future of Families and Child Wellbeing Study (n.d.c.).

Note that these findings contrast with a study using data from the National Survey of Family Growth (NSFG) by Kelly Musick and Katherine Michelmore (2015). Their study found that approximately 59 percent of parents who were cohabiting but not married at the time of a first birth went on to marry each other within five years. The Future of Families findings suggest that the share of cohabiting couples that go on to marry each other is closer to 27 percent (Table A1).

This discrepancy is likely due to a few key factors. Firstly, the NSFG sample is broader than the Future of Families sample by including all cohabiting births, not only those in urban hospitals. Second, the NSFG sample includes only first births, compared to approximately 36 percent of Future of Families births that were first births. Lastly, the NSFG uses a retroactive question about the relationship status of couples that had a first birth within the past 10 years of the survey, while the Future of Families Study asked about relationship status in real time. Research suggests that retroactive cohabitation questions underestimate cohabition rates (Hayford and Morgan 2008).

Figure 2. Persistence of Family Poverty Among Children Born to Unmarried Parents
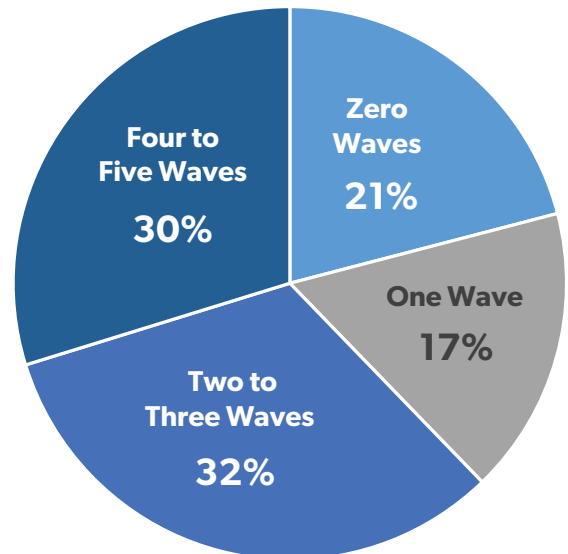
Note: This figure reflects only those mothers with complete data in all six waves, $N = 1,496$. Data are weighted to reflect births in large US cities.
Source: Waves 1–6 in the Future of Families and Child Wellbeing Study (n.d.c.).

Figure 3. Relationship Status Among Biological Parents Unmarried at Childbirth
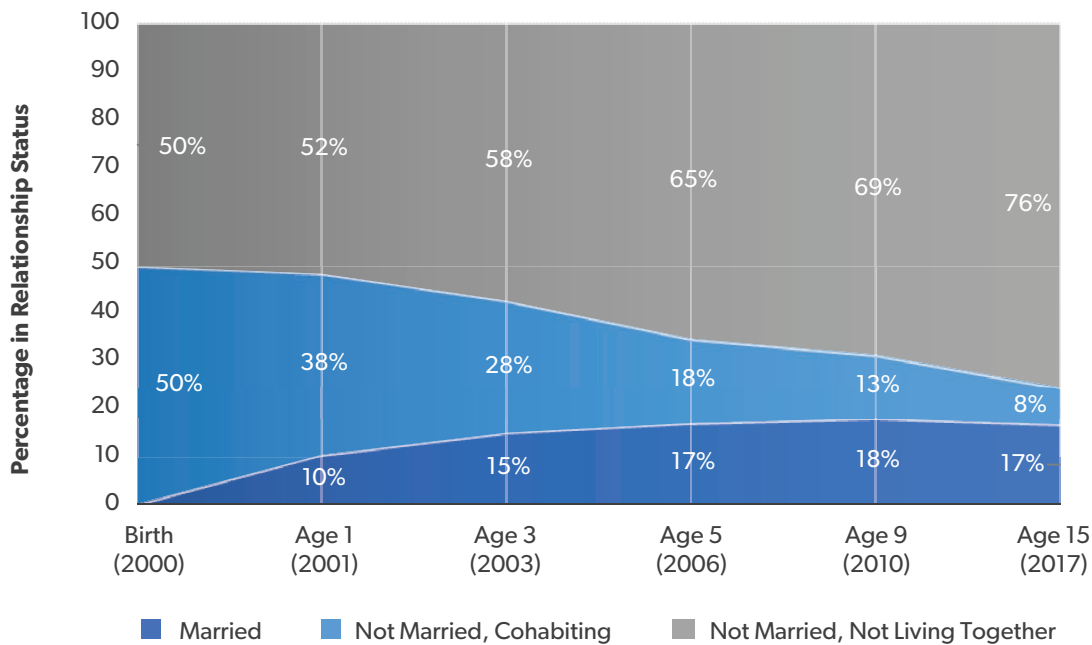
Note: Data are weighted to reflect births in large US cities.
Source: Waves 1–6 in the Future of Families and Child Wellbeing Study (n.d.c.).

Although an increasingly small share of unmarried biological parents lived together across survey years, relationships formed between the mothers and other people. Starting with the age 3 wave, the survey asked mothers about romantic relationships with other people when appropriate. Once the relationship between the biological parents ended, mothers unmarried at childbirth increasingly developed cohabiting or marital relationships with people other than the child's biological father.

As shown in Figure 4, by the time the child was age 3, approximately 13 percent of mothers unmarried at childbirth had developed a new relationship (11 percent cohabiting with a person other than the biological father and 2 percent married to another person). By the time the child was 15, 28 percent of mothers unmarried at childbirth either cohabited with or married someone other than the biological father. However, the largest share of mothers remained single (i.e., not married or romantically cohabiting with the father or another adult) by the time the child was age 15 (48 percent).

Relationship breakups and new formations led to family instability, with 80 percent of children born to

unmarried parents experiencing a different relationship status (between their mothers and a partner) between the age 1 and age 15 surveys (Figure 5). Most of this instability came from movement out of biological parent relationships rather than marriage between biological parents. For example, as shown in Table A1, 27 percent of biological parents who were cohabiting at the time of the birth got married to each other before the child was age 15, with a smaller percentage of those who were not living together getting married in later years. This means a sizable share of children born to unmarried parents experienced instability in their parents' relationship, as well as instability among other relationships their mother formed.

Official Poverty Rates by Marital and Relationship Status. Overall, average poverty rates for mothers unmarried at childbirth declined across survey years; however, the rate of decline differed depending on mothers' relationship status at the time of the survey. Without controlling for any other factors, single mothers had relatively high poverty rates compared to cohabiting and married mothers (Figure 6). This finding is unsurprising since the

Figure 4. Relationship Status Among Mothers Unmarried at Childbirth
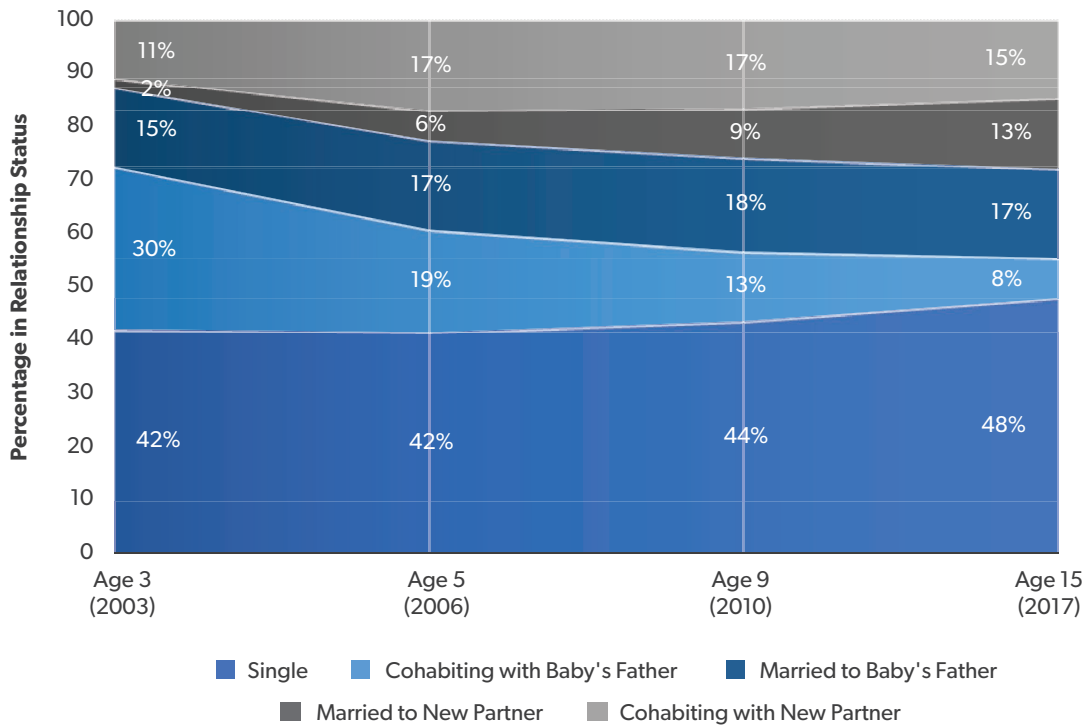
Note: Data are weighted to reflect births in large US cities.
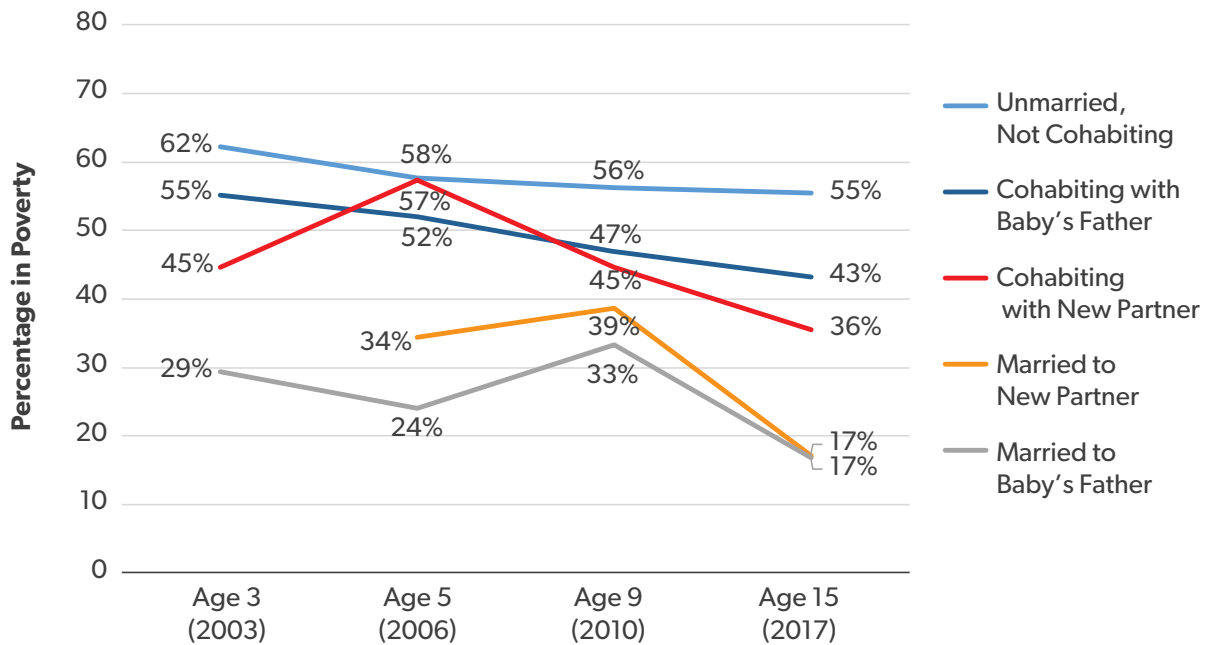Source: Waves 3–6 in the Future of Families and Child Wellbeing Study (n.d.c.).

Figure 5. Family Situation Across Survey Waves Among Mothers Unmarried at Childbirth
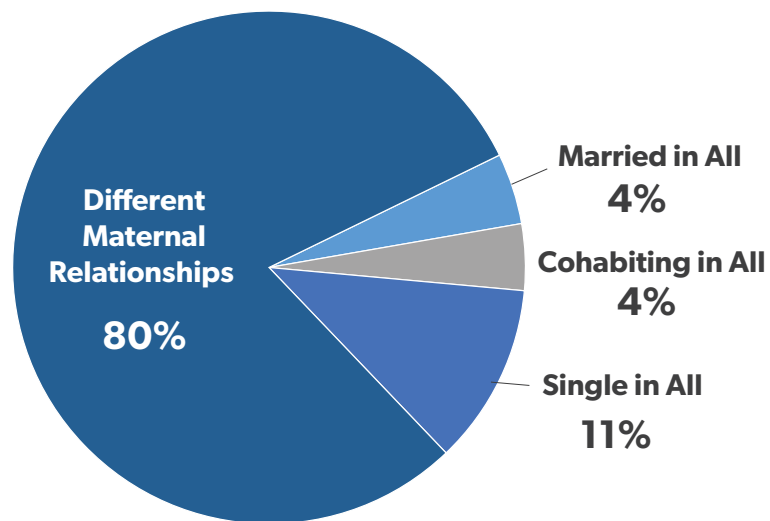
Note: The data reflect changes in the family situation at survey waves 2–6, when the child was age 1–15. This captures the small share of biological unmarried parents who married after the birth. Different maternal relationships reflect at least one survey wave in which the mother's relationship status was different from when the child was age 1. The other categories reflect the same relationship status at each survey wave from age 1 to age 15. The data reflect only those mothers with complete data on waves 2–6, N = 1,496. The data are weighted to reflect births in large US cities.
Source: Waves 2–6 in the Future of Families and Child Wellbeing Study (n.d.c.).

Figure 6. Poverty Rate by Mothers' Relationship Status Among Mothers Unmarried at Childbirth

Note: Only 45 mothers were married to a new partner at the age 3 survey wave. The data are weighted to reflect births in large US cities. The data reflect the mothers' relationship status at the time of the survey.
Source: Waves 3–6 in the Future of Families and Child Wellbeing Study (n.d.c.).

presence of two adults, whether cohabiting or married, offers the potential for two incomes. However, at the time of each survey, average poverty rates were higher for cohabiting mothers compared to married mothers, suggesting a potential selection effect (i.e., the type of people who cohabited differed from those who married).[4]

Maternal Employment. Employment levels among mothers unmarried at childbirth shifted from part-time and part year to full-time as the child aged. As shown in Figure 7, when the child was age 1, only 21 percent of mothers unmarried at childbirth worked full-time in the previous year, but by age 15, the percentage was 53 percent. As a larger share of mothers who were unmarried at childbirth worked full-time, a smaller share worked part-time and part year, especially after the child turned age 1 and age 3. Furthermore, a slightly smaller share reported not working at all, suggesting a shift

toward full-time employment after the child became school-age.

Less than half of mothers unmarried at childbirth reported employment (full- or part-time) in every survey year, suggesting employment instability across time. As shown in Figure 8, 36.5 percent of mothers unmarried at childbirth reported working at least part-time in the previous 12 months on every survey. Only 2.9 percent reported no employment at all in the previous 12 months on every survey, with the remaining 60.6 percent reporting employment in some years but not in others. This suggests that the vast majority of mothers unmarried at childbirth worked at some point, but less than 40 percent had employment in each survey year.

Higher rates of full-time employment correlated to lower poverty rates across survey years, without controlling for other factors. In each survey year, among the group of mothers who were unmarried at childbirth,

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4   The mother, as the survey respondent, self-reports household income, which researchers compare to the poverty threshold based on household size to determine the poverty rate. Therefore, the poverty rate for cohabiting households should include the income of both adults, to the extent that it exists.

Figure 7. Employment Status Among Mothers Unmarried at Childbirth
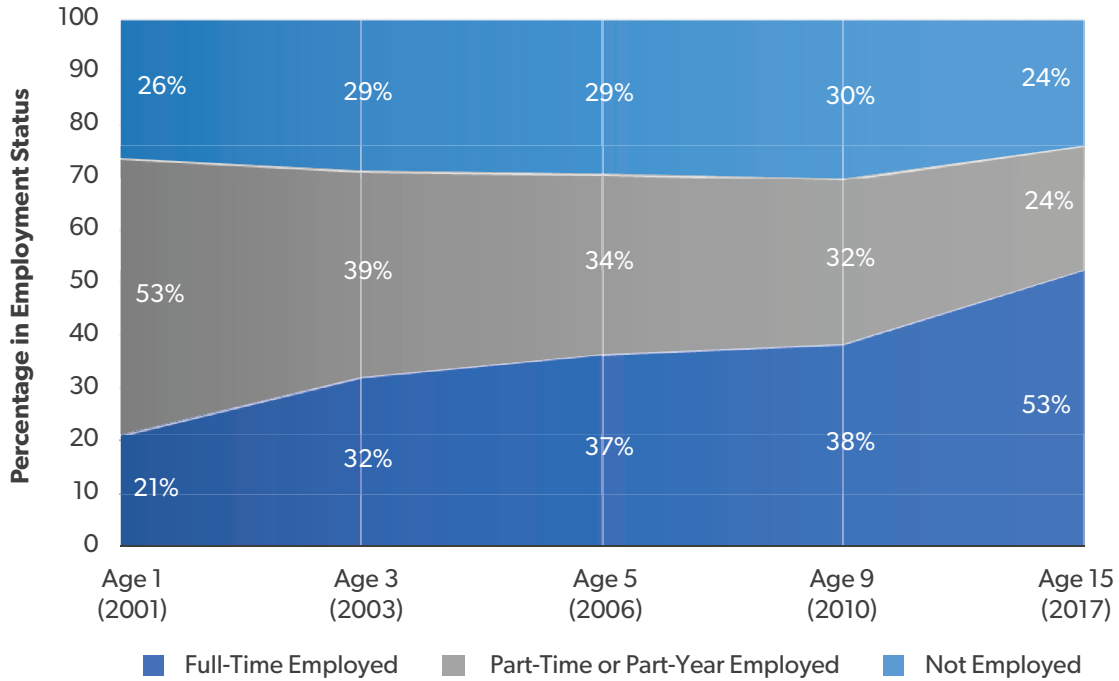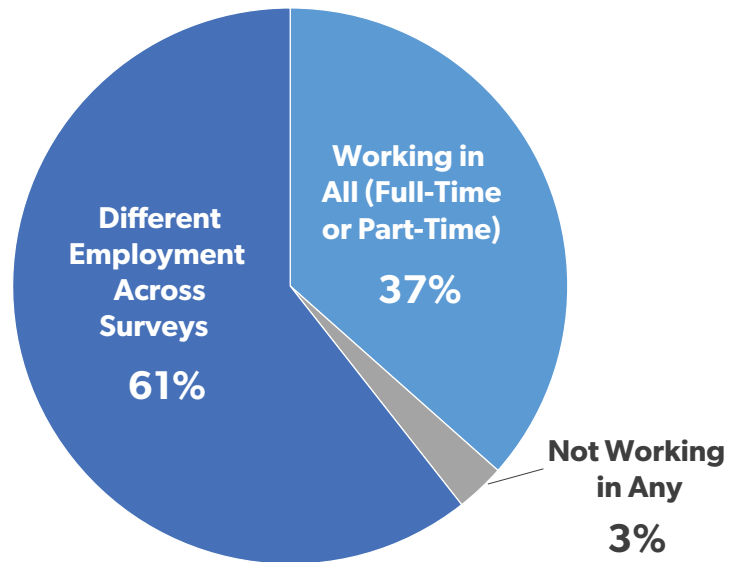

Note: The data are weighted to reflect births in large US cities.
Source: Waves 2–6 in the Future of Families and Child Wellbeing Study (n.d.c.).

those with full-time employment in the previous year were far more likely to escape poverty than mothers who worked part-time and part year or not at all (Figure 9). At the time of the age 15 survey, the poverty rate for mothers unmarried at childbirth who worked full-time was less than half that of part-time and part-year workers and less than one-third of the poverty rate for nonworkers. For nonworkers at the time of each survey, more than 60 percent were below the official poverty line, which did not change substantially over time even though a smaller share of mothers did not work at all in the previous year.

The average poverty rates for part-time or full-time workers were lower than the poverty rates for nonworkers in each survey, exhibiting modest declines over time. A number of factors contributed to lower poverty rates for workers versus nonworkers, including compositional changes (changes to the types of workers who worked full- and part-time), hours worked, and

Figure 8. Employment Situation Across Survey Waves

Note: This figure reflects employment in the year before the survey, starting with the age 1 survey. It also reflects mothers with complete data across all survey waves, $N = 1,496$. The data are weighted to reflect births in large US cities.
Source: Waves 2–6 in the Future of Families and Child Wellbeing Study (n.d.c.).

Figure 9. Poverty Rate by Employment Status Among Mothers Unmarried at Childbirth
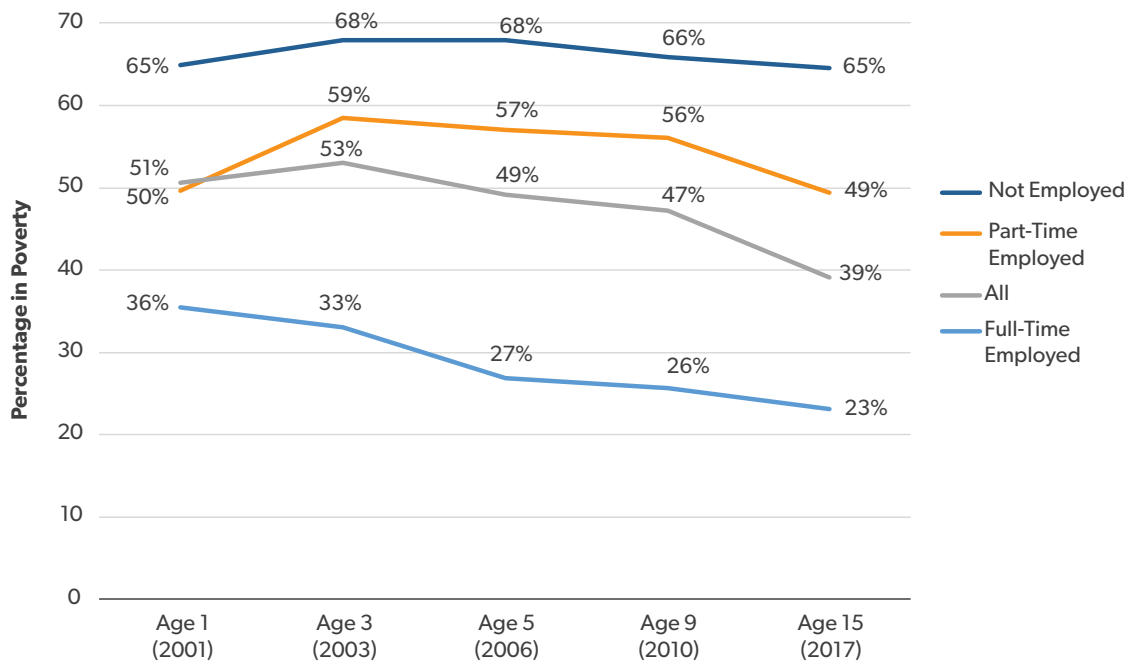
Note: The data are weighted to reflect births in large US cities.
Source: Waves 2–6 in the Future of Families and Child Wellbeing Study (n.d.c.).

wage rates. Notably, poverty rates do not reflect many government benefits, such as the earned income tax credit and food assistance, which would have further reduced these overall levels of poverty and likely would influence trends over time.

Education Level. Education level among mothers unmarried at childbirth increased across survey years. By the time the child was age 15, a substantially higher percentage of mothers unmarried at childbirth had some college or technical education compared to the percentage at the time of the birth. As Figure 10 shows, 45.1 percent of unmarried mothers had less than a high school education when the child was born; however, by the time the child was age 15, only 25.5 percent of this same group had less than a high school education. The percentage with some college, including technical school, more than doubled during this time, demonstrating considerable education gains for this group.

Age and maturation likely played a role in these education gains. For example, one-quarter of unmarried mothers in the sample were in their teens at the time of

their child's birth, many of whom likely completed their education after the birth of their child.

Without controlling for any other factors, a higher maternal education level was associated with lower poverty rates. As shown in Figure 11, mothers unmarried at childbirth with at least a high school education at the time of the survey were less likely to be in poverty compared to those with less than a high school education. Although poverty gaps by education level remained consistent across time, poverty rates within each education level fluctuated across the three time points, which likely reflected changes to the compositional makeup of those in each education category and the economic downturn around 2010.

The Success Sequence: Marriage, Employment, and Education. One of the success-sequence milestones is having children within marriage, which means that by definition, the focus population of this study—unmarried mothers—did not follow the success sequence. However, the framework still offers a useful way to assess how marital status, full-time employment,

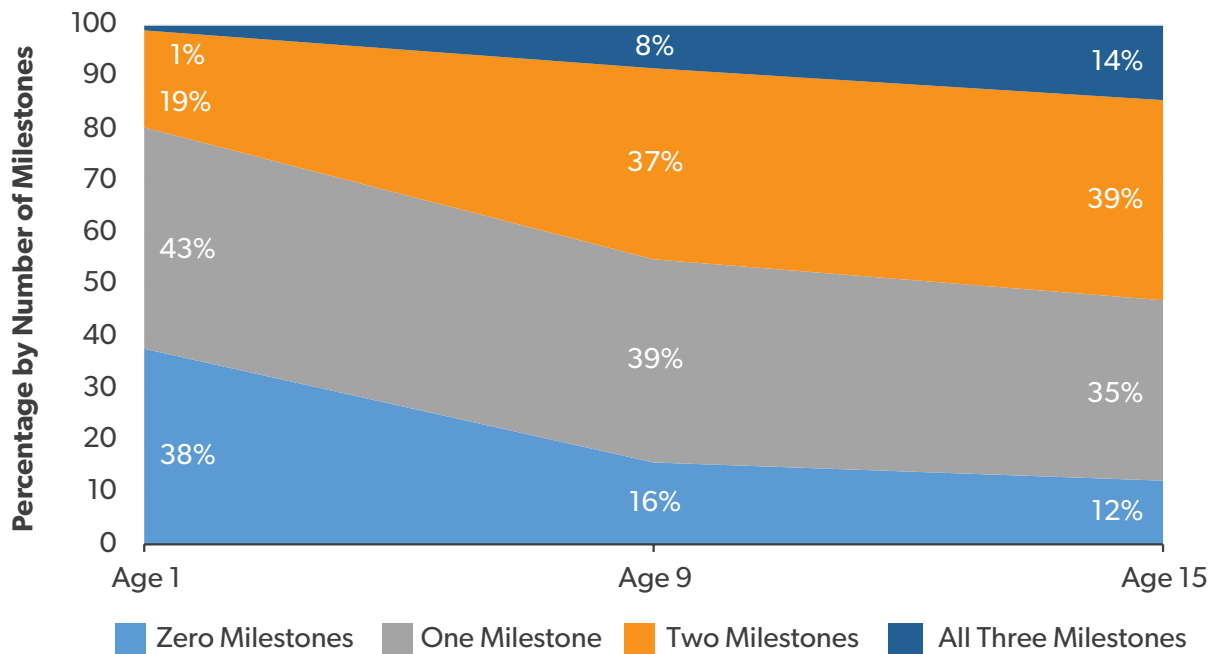**Figure 10. Education Level Among Mothers Unmarried at Childbirth**
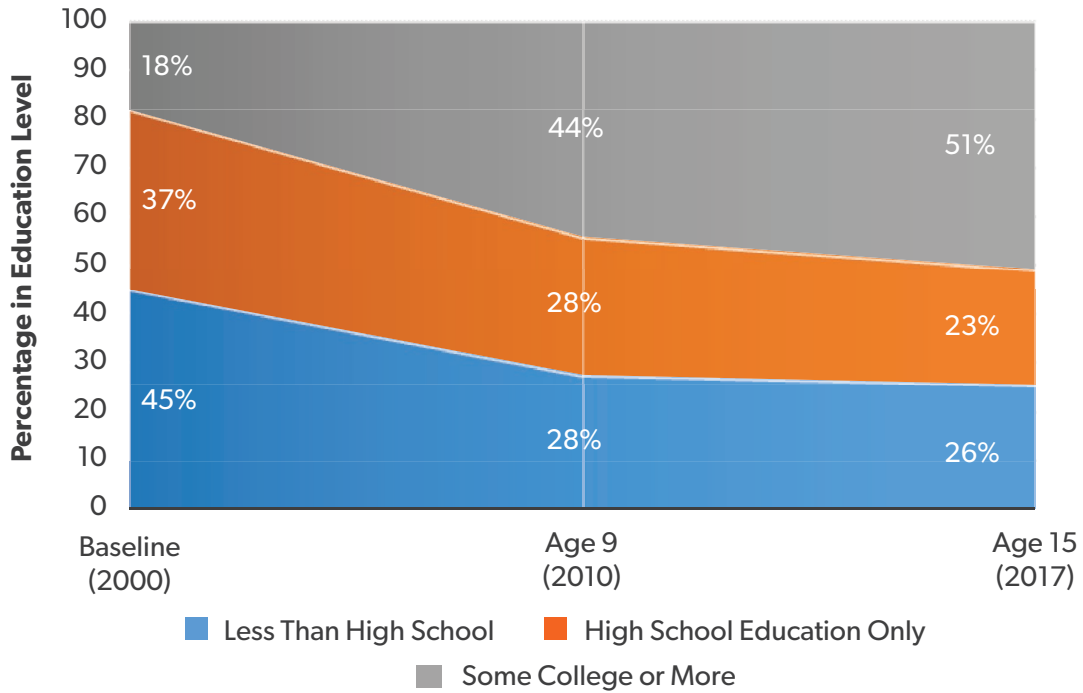
Note: The data are weighted to reflect births in large US cities.
Source: Waves 1, 5, and 6 in the Future of Families and Child Wellbeing Study (n.d.c.).

Figure 11. Poverty Rate by Mother's Education Level Among Mothers Unmarried at Childbirth
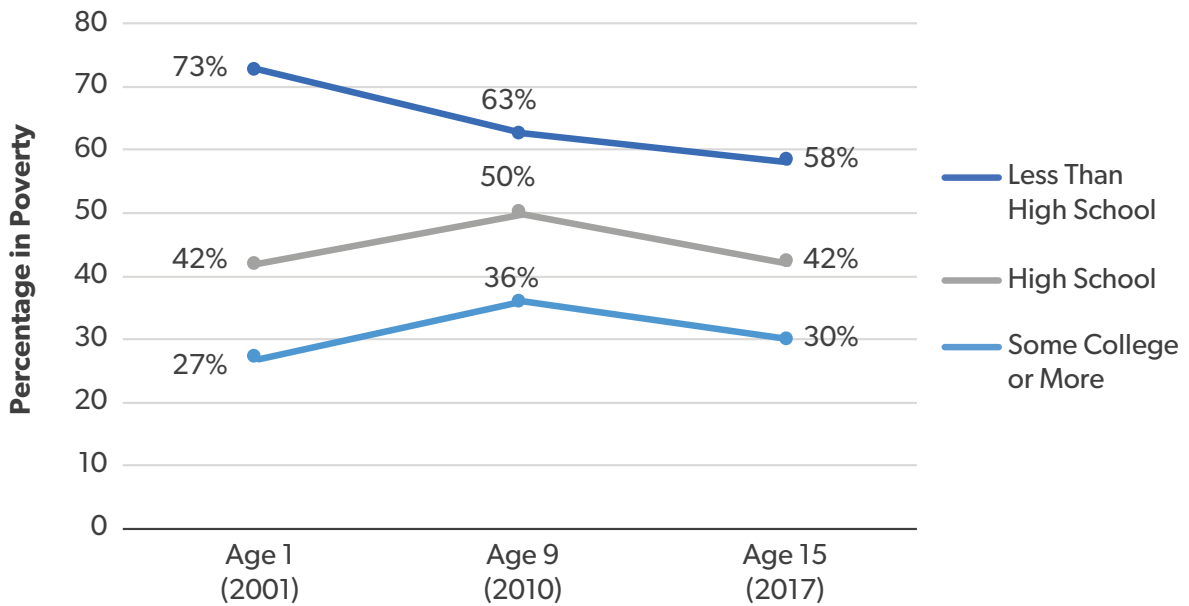
Note: Education level was only asked in the baseline, age 9, and age 15 surveys. The data are weighted to reflect births in large US cities.
Source: Waves 1, 2, 5, and 6 in the Future of Families and Child Wellbeing Study (n.d.c.).

Figure 12. Success-Sequence Milestones Reached Among Mothers Unmarried at Childbirth

Note: Mothers were asked about education level only in the baseline, age 9, and age 15 surveys. The data are weighted to reflect births in large US cities.
Source: Waves 1, 2, 5, and 6 in the Future of Families and Child Wellbeing Study (n.d.c.).

and education interrelate to affect poverty rates even after a nonmarital birth. I considered full-time employment, having at least a high school education, and being married at the time of the survey as the three success-sequence milestones and calculated average poverty rates by the number of milestones achieved.

As shown in Figure 12, over one-third of mothers unmarried at childbirth had reached none of the success-sequence milestones (including being married) by the age 1 survey (38 percent), and 43 percent had reached only one milestone. At the time of the age 15 survey, the share of mothers unmarried at childbirth who had reached at least one success-sequence milestone increased to almost 90 percent, yet most had not achieved all three. At the time of the age 15 survey, still only 14 percent had achieved all three milestones.

Figure 13 shows the inverse relationship between poverty rates and reaching success-sequence milestones. Mothers unmarried at childbirth who reached more success-sequence milestones at the time of each

survey had lower poverty rates on average than those who reached fewer milestones did. Focusing on the time of the age 15 survey, 78 percent of mothers unmarried at childbirth who had not displayed any success-sequence milestones were in poverty, compared to only 9 percent who displayed all three milestones, a statistically significant difference. Achieving at least two milestones also correlated to substantially lower poverty rates at the age 15 survey compared to one milestone or none. This suggests the relative importance of all three factors in lowering poverty even for those mothers who were unmarried at the time of childbirth.

Because this group of mothers already had a child outside of marriage and only a small share went on to get married (missing one of the original success-sequence milestones), I also explored the association between poverty rates and the education and employment milestones by marital status after the birth. Figure 14 shows the importance of both a high school education and full-time employment even for those who remained unmarried at

Figure 13. Poverty Rates by Number of Success-Sequence Milestones Reached Among Mothers Unmarried at Childbirth
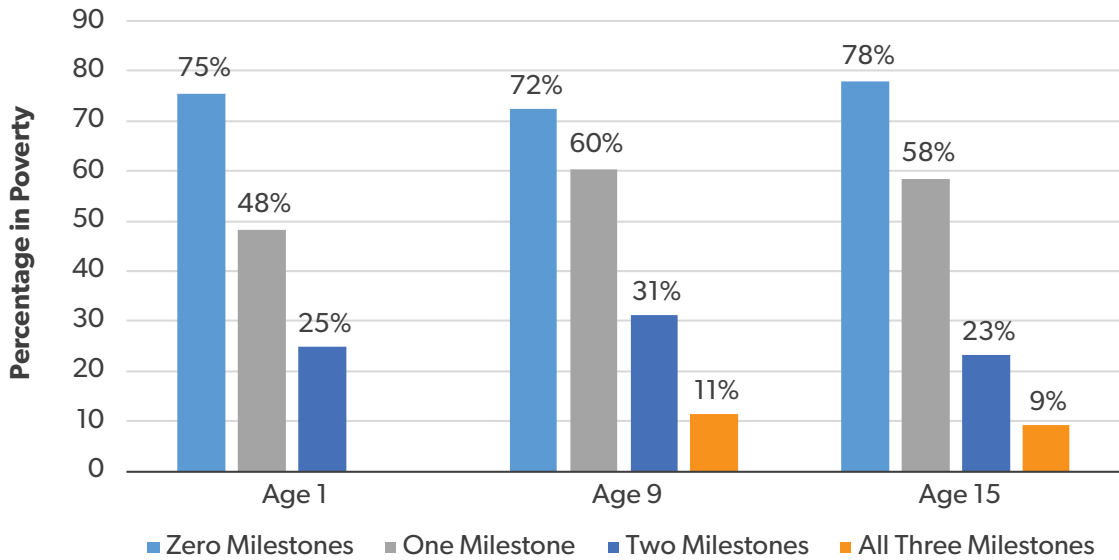
Note: The differences in poverty rates for groups with zero or one milestone compared to two or three were statistically significant at the 0.10 level at each survey wave. The differences in poverty rates for the group with two milestones compared to the group with three milestones were statistically significant at the 0.10 level for the age 9 and age 15 survey waves. The differences between zero and one milestone were not statistically significant across survey waves. An average poverty rate for those with all three milestones at the age 1 survey is not shown due to a small sample size. Mothers were asked about education level only in the baseline, age 9, and age 15 surveys. The data are weighted to reflect births in large US cities.
Source: Waves 1, 2, 5, and 6 in the Future of Families and Child Wellbeing Study (n.d.c.).

Figure 14. Poverty Rates by Marital Status and Education and Employment Milestones at the Age 15 Survey
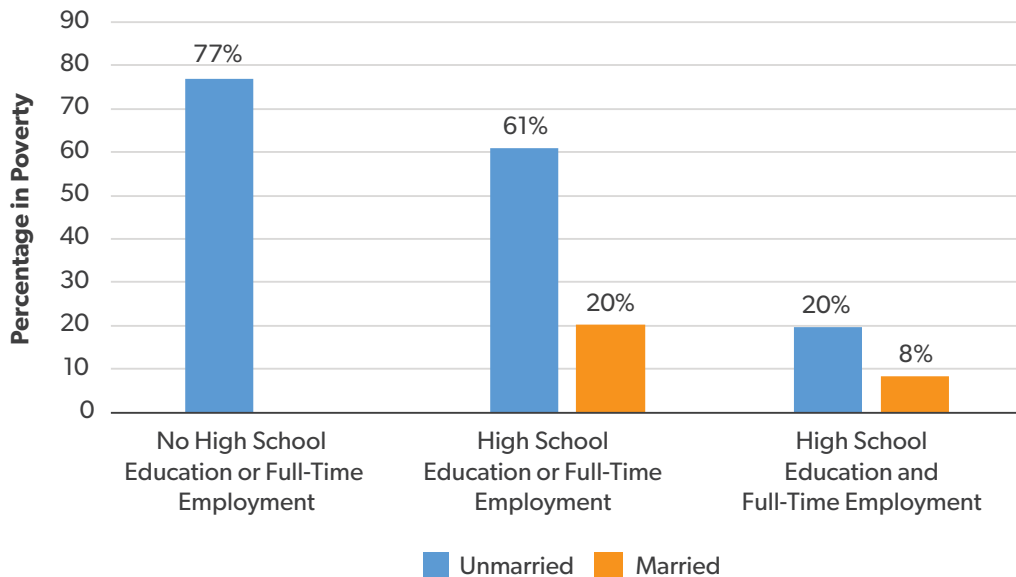
Note: The differences in poverty rates by milestone achievement for the unmarried group were statistically significant at the 0.10 level. The differences in poverty rates by milestone achievement for the married group were large but not statistically significant due to a small sample size. The average poverty rate for the married group without a high school education or full-time employment is not shown due to a small sample size. The data are weighted to reflect births in large US cities.
Source: Wave 6 in the Future of Families and Child Wellbeing Study (n.d.c.).

the time of each survey wave. At the time of the age 15 survey, among mothers who remained unmarried, only 19.5 percent who had a high school education and worked full-time were in poverty. However, among mothers who remained unmarried at the age 15 survey and reached only one or none of the education or employment milestones, the chances of being in poverty tripled.

Among the group of mothers unmarried at childbirth who later married, having at least a high school education and working full-time also correlated to lower poverty rates than for similar mothers who had reached only one educational or employment milestone, although due to small sample sizes, the differences were not statistically significant. Nonetheless, these results suggest that for many mothers unmarried at childbirth, getting married likely reduces the chances of living in poverty. For mothers who do not marry later in life, these findings indicate that having a high school education and working full-time are crucial factors for reducing their risk of poverty.

Transitions and Poverty Rates

The findings so far confirm several established associations. Marriage, full-time employment, and higher education levels correlated to lower poverty rates in every survey year among mothers who were unmarried at childbirth. However, the poverty rates at various points in time presented in the preceding section do not necessarily shed light on how transitions toward success-sequence milestones—higher education, full-time employment, and marriage—after the nonmarital birth affected families' average poverty rates. Therefore, I calculated average poverty rates for groups of mothers who were unmarried at childbirth before and after a transition into marriage, full-time employment, and at least a high school education.

Relationship Transitions and Poverty. Figure 15, Panel A shows the official poverty rate for mothers unmarried at childbirth based on relationship status changes from the time of the birth to the age 5 survey. Because my analysis started with mothers who were unmarried at childbirth, all mothers stayed single or cohabiting or transitioned between status or got married by the age 5 survey. Figure 15, Panel B shows transition groups based

on the relationship status of the mother at childbirth compared to their relationship status during the age 15 survey.

Both transition groups in Figure 15, Panel A experienced a decline in average poverty rates between the age 1 and age 5 surveys, although neither reduction was statistically signficant. Comparing mothers before and after relationship transitions from the birth to the age 15 survey (Panel B) shows that the group that transitioned into marriage by the age 15 survey experienced a larger decline in average poverty rate than the group that remained single or cohabiting—a statistically signficant decline. The average poverty rate among the group that transitioned into marriage declined by 20 percentage points, compared to 6 percentage points for the group that remained single or cohabiting at the time of the age 15 survey.
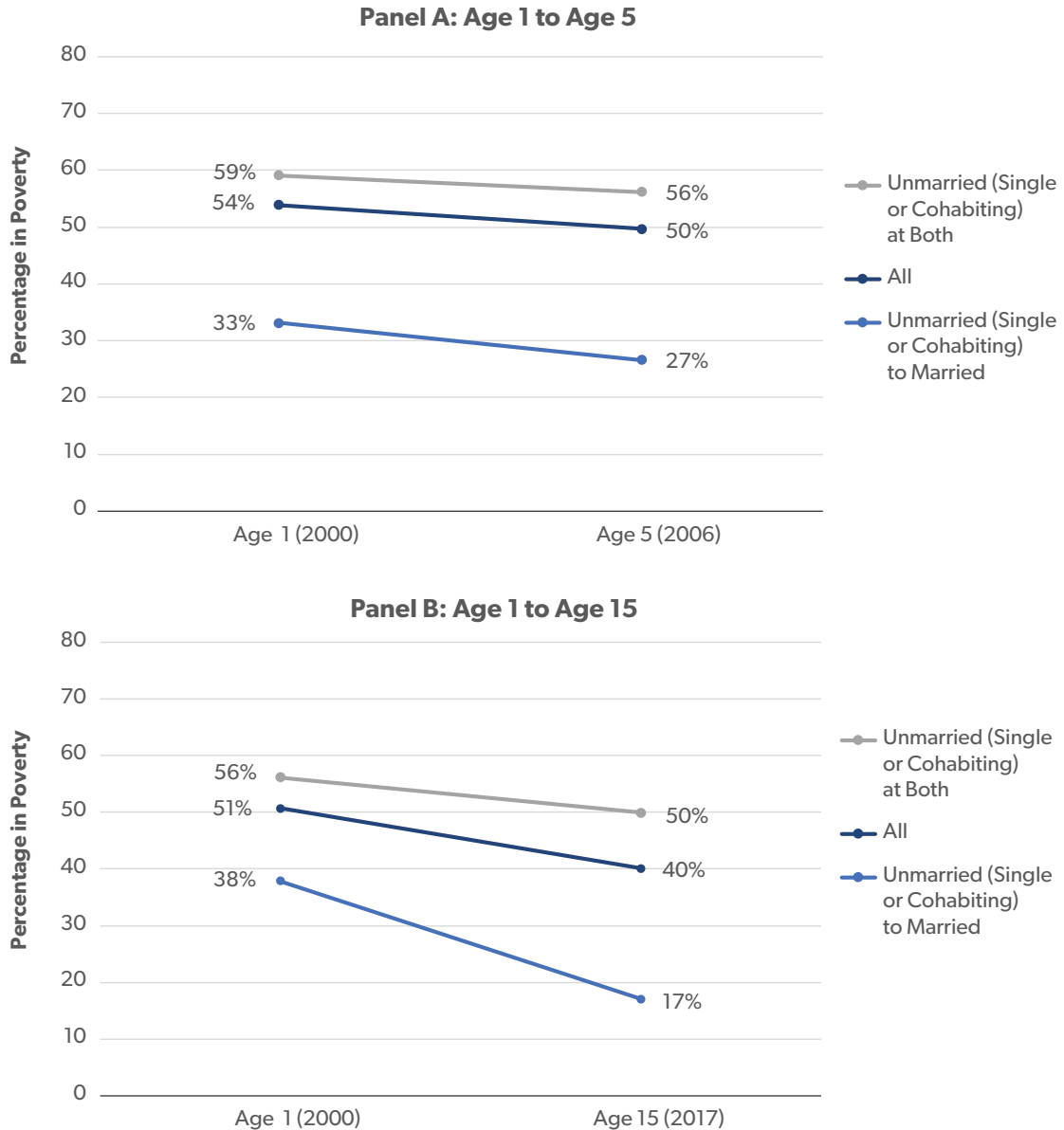
Employment Transitions and Poverty Rates. Figure 16, Panel A shows changes in poverty rates among groups before and after an employment transition from the age 1 survey to the age 5 survey. Mothers who moved from less than full-time employment to full-time employment by the age 5 survey experienced a statistically significant decrease in average poverty rates, while those who moved away from full-time employment experienced an increase in average poverty rates, although those increases were not statistically signficant.

A similar pattern emerged when comparing poverty rates among the transition groups before and after the employment transition between age 1 and age 15 (Panel B). The largest reduction in average poverty rates, and the only statistically signficant change, was among the group that transitioned from less than full-time employment at the age 1 survey to full-time employment at the age 15 survey. Mothers who maintained or transitioned into full-time employment experienced the largest reductions in poverty after the transition and had the lowest overall poverty rates regardless of the average poverty rate before the transition.

Education Transition and Poverty. Next, I explored the relationship between changes in maternal education level from the time of the birth to the age 15 survey and average poverty rates before and after the education transition. The Future of Families survey asked about maternal education level only in the baseline, age 9, and

Figure 15. Poverty Rate by Marital Status Among Mothers Unmarried at Childbirth

Panel A: Age 1 to Age 5

Legend:
- Unmarried (Single or Cohabiting) at Both
- All
- Unmarried (Single or Cohabiting) to Married

Data points:
- 59% → 56% (Unmarried at Both)
- 54% → 50% (All)
- 33% → 27% (Unmarried to Married)

X-axis: Age 1 (2000), Age 5 (2006)
Y-axis: Percentage in Poverty (0–80)

Panel B: Age 1 to Age 15

Legend:
- Unmarried (Single or Cohabiting) at Both
- All
- Unmarried (Single or Cohabiting) to Married

Data points:
- 56% → 50% (Unmarried at Both)
- 51% → 40% (All)
- 38% → 17% (Unmarried to Married)

X-axis: Age 1 (2000), Age 15 (2017)
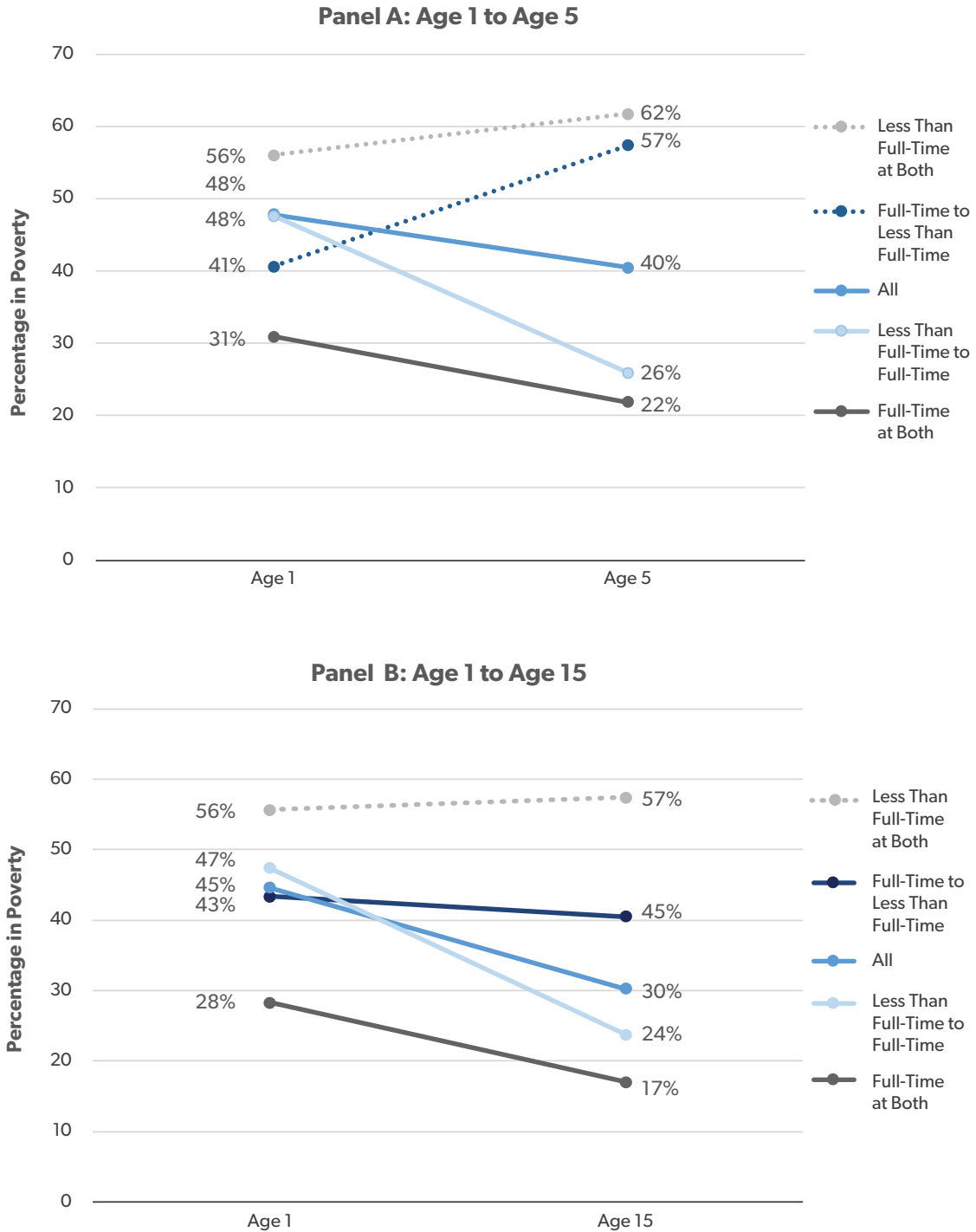Y-axis: Percentage in Poverty (0–80)

Note: The data are weighted to reflect births in large US cities. Panel A: No differences in average poverty rates were statistically significant at the 0.10 level. Panel B: The decline in average poverty rates was statistically significant at the 0.10 level for all (blue line) and at the 0.05 level for the group that transitioned from single or cohabiting to married (dark blue line).
Source: Waves 1–6 in the Future of Families and Child Wellbeing Study (n.d.c.).

age 15 surveys. As shown in Figure 17, increased education correlated to lower poverty rates on average over time. For example, among mothers unmarried at childbirth with less than a high school education, those who gained at least a high school education by the time of the age 15 survey experienced a statistically significant 25 percentage point decline in average poverty rates from before to after the transition. This supports that the success-sequence milestone of having at least a high school education lowers the odds of poverty.

Figure 16. Poverty Rate by Employment Transition Among Mothers Unmarried at Childbirth

Panel A: Age 1 to Age 5

Legend:
- Less Than Full-Time at Both
- Full-Time to Less Than Full-Time
- All
- Less Than Full-Time to Full-Time
- Full-Time at Both

Panel B: Age 1 to Age 15

Legend:
- Less Than Full-Time at Both
- Full-Time to Less Than Full-Time
- All
- Less Than Full-Time to Full-Time
- Full-Time at Both

Note: Dotted lines reflect an increase in average poverty rates, and solid lines reflect a decrease. Data are weighted to reflect births in large US cities. Panel A: The only statistically significant change in average povety rate at the 0.05 level was among the group that transitioned from less than full-time work to full-time work (light blue line). Panel B: The only statistically significant change in average povety rate at the 0.05 level was among the group that transitioned from less than full-time work to full-time work (light blue line). The sample size for the group that transitioned from full-time to less than full-time work was small.

Source: Waves 1, 2, and 6 in the Future of Families and Child Wellbeing Study (n.d.c.).

Figure 17. Poverty Rate at Age 1 and Age 15 by Education Transition
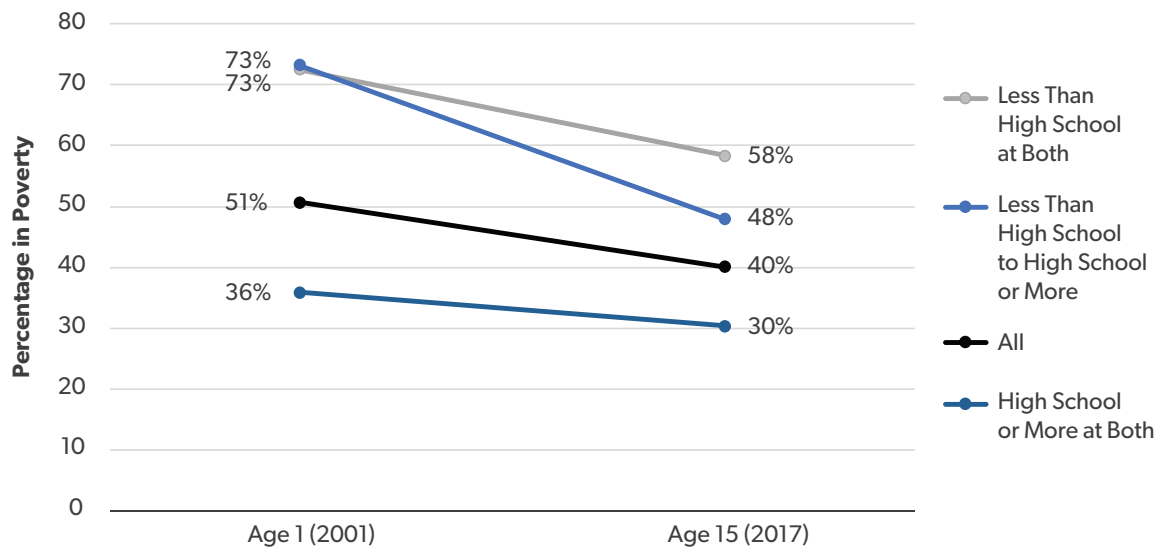
Note: The only statistically significant difference in poverty rates (0.10 level) from age 1 to age 15 was among the group that transitioned from less than high school to high school or more. Data are weighted to reflect births in large US cities.
Source: Waves 2 and 6 in the Future of Families and Child Wellbeing Study (n.d.c.).

Conclusions and Implications

In this study, I used Future of Families Study data to explore changes to official poverty rates, relationship status, maternal employment, and maternal education across six survey waves covering 15 years after the birth of a child to unmarried parents. The Future of Families Study provides a unique opportunity to gain a deeper understanding of family dynamics following the birth of a child to unmarried parents.

Among the full cohort of mothers who were unmarried at childbirth, official poverty rates declined modestly across survey years; the share of unmarried mothers in poverty declined from 54 percent to 40 percent (and the share in deep poverty declined from 29 percent to 19 percent) as the child aged from 1 to 15. However, a large majority of children born to unmarried parents were in poverty in at least one survey year after the birth.

Only a small share of unmarried mothers worked full-time in the early survey years after the birth, but full-time employment increased in later survey years. The majority of mothers unmarried at childbirth reported different employment statuses at the time of each survey, suggesting that many mothers went in and out of employment across time. Mothers unmarried at childbirth also improved their education levels quite impressively by the time of the later survey years, with more than half having some college or technical education by the age 15 survey, compared to only 18 percent at the time of the birth. Unsurprisingly, moving into full-time employment and higher education levels over time correlated to lower official poverty rates on average for this group.

Changes to the mothers' relationship status across the survey years were common. At birth, approximately half of unmarried mothers cohabited with the biological father, and the other half lived apart. However, by the age 15 survey, nearly 80 percent did not live together, and only 16 percent had married each other. Many mothers formed new relationships with other adults, including marriage and cohabitation. Still, by the age 15 survey, 47 percent of mothers unmarried at childbirth were single, meaning not married or cohabiting with the biological father or another romantic partner.

Changes to relationship status, employment status, and educational attainment had implications for official poverty rates. Without controlling for other factors, mothers unmarried at childbirth who were married at the time of the age 15 survey (either to the biological father or another partner) experienced a statistically significant decrease in poverty rates after the transition to marriage, while those who remained unmarried did not. Mothers unmarried at childbirth who moved into full-time employment also experienced lower average poverty rates after the transition. Additionally, unmarried mothers with less than a high school education at the time of their child's birth experienced lower poverty rates on average when they transitioned into higher education.

When I examined the interplay between relationship status, employment, and education within the success-sequence framework, I found that when mothers who were unmarried at childbirth subsequently married, worked full-time, and had at least a high school education, they had much lower poverty rates than those who did not meet these success-sequence milestones. Marriage appeared to be a particularly important factor, correlating with relatively low poverty rates regardless of whether the mother also met the employment and education milestones. However, among unmarried mothers who remained unmarried at the time of the age 15 survey (constituting the majority), the combination of a high school education and full-time employment correlated to lower poverty rates compared to having only one or none of these achievements.

Unmarried parenthood continues to be an important factor underlying poverty in the US, placing families in this category at the forefront of policy considerations. According to the official poverty rate in 2022, families led by single mothers represented nearly 60 percent of all families with children living in poverty, despite constituting just one-quarter of all family types (Shrider and Creamer 2023).

In recent years, policy debates have focused on whether the United States should increase government support for low-income families, a substantial proportion of which are headed by a single mother, as a means to reduce poverty. On one hand, advocates promote increasing cash transfers to poor families by expanding programs such as the child tax credit or creating universal basic income programs. Supporters point to the one-year drop in child poverty rates that resulted from the federal government's temporary expansion of the child tax credit in 2021 as evidence that increasing government payments will reduce child poverty rates (Koutavas et al. 2023).

Conversely, some advise against the permanent expansion of government programs without taking into account potential trade-offs, as this could lead to adverse long-term consequences for families. These consequences may include decreased employment rates, lower marriage rates, reduced opportunities for upward mobility, and a deceleration of economic growth (Meyer and Corinth 2021).

The Future of Families data sound a cautionary note on government policies that provide income support without considering potential trade-offs. Mothers unmarried at childbirth who remained single, lacked full-time employment, and lacked at least a high school education experienced exceptionally high official poverty rates in the years following a nonmarital birth (exceeding 75 percent and rising over time), whereas those who transitioned into marriage, full-time employment, and higher educational attainment experienced the opposite trend, with poverty rates under 10 percent. Even without marriage, full-time employment and at least a high school education correlated to lower official poverty rates. Lastly, even though this cohort of unmarried mothers initially failed to follow the success sequence by having a child outside of marriage, those who had a high school education, worked full-time, and were married at the time of the age 15 survey experienced poverty rates approximately 10 times lower than those who did not demonstrate these characteristics.

Achieving success-sequence milestones was important for this cohort of mothers even though they did not follow them in order. Policymakers run the risk of inadvertently steering more families away from the success sequence when they expand transfer payments that disregard potential effects on marriage and employment. Such an approach could ultimately increase poverty and the need for assistance among children born to unmarried parents and increase their dependence on government assistance. Instead, federal policies should give priority to the importance of marriage, full-time employment, and education as a way to reduce poverty and

formulate policies accordingly, even among families that initially have a child outside of marriage.

Limitations

As with any longitudinal study, survey attrition can affect the results. For more information on the Future of Families survey, including attrition rates, visit the data and documentation page (Future of Families and Child Well-being Study n.d.b.). The estimates at each survey wave were weighted to reflect births in cities with a population of 200,000 or more in 1998.

Acknowledgments

I would like to thank Thomas O'Rourke for his excellent research assistance. Also, thank you to Matt Weidinger and Kevin Corinth for their review of early drafts.

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About AEI's Center on Opportunity and Social Mobility

The Center on Opportunity and Social Mobility, directed by Scott Winship, conducts rigorous research and develops evidence-based policies aimed at expanding opportunity in America by reducing entrenched poverty, increasing upward mobility, and rebuilding social capital.

About AEI's Perspectives on Opportunity

AEI's Perspectives on Opportunity is a policy report series published by the Center on Opportunity and Social Mobility (COSM). Contributions to this series include empirical and theoretical analysis of issues related to opportunity in the United States and evidence-based policy proposals to expand opportunity, promote upward mobility, and strengthen social capital. COSM Deputy Director Kevin Corinth is the editor of Perspectives on Opportunity.

Appendix A

Table A1. Family Situation by Survey Year

Baseline	Age 1			Age 3			Age 5			Age 9			Age 15		
	Married	Cohabiting	Not Living Together	Married	Cohabiting	Not Living Together	Married	Cohabiting	Not Living Together	Married	Cohabiting	Not Living Together	Married	Cohabiting	Not Living Together
Married to Baby's Father	94%	1%	5%	89%	1%	10%	81%	1%	18%	74%	1%	25%	63%	2%	35%
Cohabiting with Baby's Father	15%	55%	30%	21%	37%	41%	24%	24%	52%	23%	17%	60%	27%	9%	64%
Not Living Together	5%	24%	71%	8%	19%	73%	9%	12%	79%	9%	9%	81%	7%	3%	90%

Note: Data are weighted to reflect births in large US cities.
Source: Author's calculations using data from waves 1–6 in the Future of Families and Child Wellbeing Study (n.d.c.).

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