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ABSTRACT

This study investigates the extent to which childhood poverty experience and family variables affect the persistence of poverty in adulthood. We use the Panel Study of Income Dynamics data where subjects are observed over multiple years both as children and adults. We examine the extent to which the persistence of poverty after age 18 and age 25 are predicted by childhood poverty experience. We find that the proportion of time spent in poverty in adulthood increases with the proportion of time spent in poverty in childhood after controlling for other personal, family, place and time-period effects. The magnitude of the effect of childhood poverty on adult outcomes gets smaller but remains significant when examining poverty experiences after age 25. We also find that there are unobserved but strong family level effects that either increase or reduce the chances of adulthood poverty substantially for some extended family units.

Introduction

In 2015, the U.S. Census bureau estimated the official poverty rate at 13.5% and that among children to be 19.7%. Roughly half of these children live in extreme poverty with incomes below 50% of the federal poverty threshold. A variety of policies have been deployed to combat poverty and its root causes since the War on Poverty was officially declared more than 50 years ago. Despite these efforts, the rapid reduction in the overall poverty rate that occurred through the 50s and 60s leveled off in the 70s. The poverty rate has been fluctuating in the range of 10–15% since (Semega et al., 2017). By one estimate, 50% of Americans will have experienced a year in poverty by age 65; among black Americans, these numbers are even higher, with more than 75% spending some time in their life below the poverty line (Rank & Hirschl, 1999). Though much of this poverty experience is transient, for a segment of the population, poverty is persistent. In this paper, we examine the effects of persistent childhood poverty on poverty incidence in adulthood.

Growing up in an environment of persistent poverty poses multiple risks to children. Evans (2004) documents the challenges poor children face, including lower social and parental support, more dangerous neighborhoods, lower school quality, higher exposure to pollutants, and others. Brooks-Gunn and Duncan (1997) provide a long list of measures that show the stark contrasts in physical health, cognitive outcomes, school achievement, behavioral outcomes, teen out-of-wedlock birth, violent crime experienced, and others, between poor and non-poor children. The differences include a 17.8% gap in those reported to be in excellent health, a 14.7% gap in those experiencing grade repetition, and a 7.4% gap in teen out-of-wedlock births, just to select a few.

Growing up in poverty has significant impacts on adult poverty experience. Early poverty has strong negative effects on cognitive development (Duncan et al., 1994), achievement (Brooks-Gunn & Duncan, 1997), and high school completion (Haveman et al., 1991). Becker and Tomes (1986) suggest that poor families may not be able to make the necessary investments in the development of their children. This appears to have been made worse by rising income inequality (Reardon, 2011). Differences between student achievement test scores for poor and high-income children have been widening over time even after controlling for parental education (Reardon, 2011).

Growing up poor makes poverty in adulthood far more likely. Becker (1981) and Becker and Tomes (1986) argue that tradeoffs between investments in children and consumption under limited resources limits intergenerational income mobility. These circumstances worsen as the number of children in a household increase (Becker & Tomes, 1986) leaving children who grow up in such environments with reduced odds of upward mobility. Closely related to such effects of nuclear families are effects of extended families. Extended families can be important for their ability to advance support to members experiencing economic difficulties. They also provide a range of role models for children.

Neighborhood effects play an important role in determining economic and other outcomes (for example, Cutler & Glaeser, 1997; Jencks & Mayer, 1990; Sampson et al., 2002; Sharkey, 2008; Sharkey & Elwert, 2011; Wilson, 1987). Wilson (1987), who focuses on the experiences of inner city ghetto residents, argues the disappearance of jobs from ghetto neighborhoods, the out-migration of working and middle class families, and increased joblessness has created an urban underclass lacking the networks to connect to mainstream economic opportunities and role models (Wilson, 2012). Significant reductions in cognitive ability is observed in children when their families have lived in such environments over several generations (Sharkey & Elwert, 2011). Corcoran and Adams et al. (1997) study intergenerational poverty using data from the Panel Study of Income Dynamics (PSID). They test the theories of

Becker (1981), Wilson (1987), discussed above, along with those of Anderson (1978), Mead (1986), and Murray (2008), who focus on the role of welfare dependence. They find substantial evidence of intergenerational persistence.

We are interested in further exploring the effects of childhood poverty experiences on adult poverty outcomes. Using the PSID data, we examine how the percentage of time that a child was in poverty affects the persistence of poverty once they become an adult. While the analysis in Corcoran and Adams et al. (1997) uses a sample from the PSID who were children in 1968, over 50% of the sample used in this analysis were born after 1968 with the youngest being born in 1989. The subjects in the previous study have gotten older and we can test if poverty outcomes have changed since. The inclusion of younger cohorts also allows us to test if there are period effects related to the economy that have affected adult poverty outcomes. In particular, we test the following hypotheses (i) that the persistence of poverty in childhood, as measured by the percentage of childhood years one spends in poverty, directly affects the percentage of years spent in poverty in adulthood, (ii) that there are period effects, which signal conditions of the overall economy, that can moderate the intensity of adulthood poverty experiences, and, (iii) that extended familial factors (e.g., family network effects, etc.) moderate the probability of better outcomes for members of the same family. We test these while controlling for individual level variables such as involvement in crime and mother's education, and place level variables for the neighborhood (Census tract). It should be emphasized that the PSID provides us a unique data set for testing extended-family effects.

In the following sections, we examine the extent to which adulthood poverty experiences are related to the persistence of poverty in childhood using data for individuals observed multiple times both in childhood and adulthood. Poverty persistence in adulthood is measured two ways, one where the period of early adulthood between the ages of 18–24 is included and another where this period is excluded, in order to investigate if the relationship between adulthood poverty and childhood poverty changes with age. In addition to childhood poverty experience, the analysis also controls for other variables that may affect adulthood poverty, including observed personal, parental and family variables, unobserved extended family level effects, tract-level income variables that capture the neighborhood and urban context of childhood, and time-period effects that serve as proxies for broader economic conditions as the children reach the age where they can enter labor force.

Data and method

Data for this analysis comes from the Panel Study of Income Dynamics (PSID) collected between 1968–2011 (Institute for Social Research, 2015). The PSID has been collected since 1968 on an annual basis until 1997 and bi-annually

since. The data is multigenerational with each individual connected to an original 1968 family by birth or marriage. In total the PSID data used in this study covers a 43-year span. Of these, we use 22 years of data counting back in two-year increments from 2011 until 1971 and including the first survey in 1968 along with the confidential census tract information for each family in the surveyed years.

We examine the relationship between the persistence of childhood poverty and the persistence of poverty in adulthood for periods of adulthood above age 18 and above age 25 respectively. To characterize persistence more reliably, we focus on respondents that have been observed at least three times as children under the age of 18 and are also observed three or more times as adults. To be included in the analysis, observations in adulthood must have been as head or wife at least once. On average subjects have been observed over 6 times in childhood and over 9 times in adulthood. In addition, we focus only on subjects who reported a residence in an urban area for 50% or more of their observations.

These criteria allow us to use data for 5058 individuals ranging in age between 22 to 55 at last observation. These individuals are connected to 1628 original families. While the last observation for a majority of the subjects in this analysis is 2011 (69%), the last observation for some in the data was as early as 1979. Table 1 provides a summary of the data.

In this paper, we use 150% of the poverty threshold (150PT) in the year of observation to designate families as living in poverty. All income variables are adjusted to account for cost-of-living differences across metropolitan areas using the Implicit Regional Price Deflator (IRPD) for 2011. The IRPD is available from the Bureau of Economic Analysis (BEA) and accounts for

Table 1. Data summary of subjects used in the analysis.

Variable		Mean	Standard Deviation
Sex	% Male	45.7%	
	% Female	54.3%	
Race	% Black	47.8%	
	% White	52.2%	
Age at last observation		36.3	9.3
Respondent's education	below high school	8.0%	
	high school	33.9%	
	greater than high school	58.1%	
Mother's education	below high school	21.6%	
	high school	38.1%	
	greater than high school	40.3%	
Ever married (%)		60.0%	
Ever jailed (%)		1.8%	
Percent of times in poverty	below age 18	36.8%	39.4%
	after age 18	28.0%	31.7%
	after age 25	25.6%	35.2%
Census tract average income (2011 $) $1,000s		56.1	23.6
Number of times observed	before 18	6.6	2.1
	after 18	9.4	4.5
N. of individuals		5058	
N. of 1968 families		1628	

price differences across metropolitan areas and time. For years that the IRPD was not published, we estimate it by using the area's or regional Consumer Price Index (CPI) for that year and for 2011 along with the BEA's IRPD numbers for 2011. The adjustment penalizes incomes in more expensive areas, so an income of $25,000 in IL in 2011 would be adjusted to $23,946 when the family lives in Chicago, IL and to $27,654 in Springfield, IL.

Childhood poverty and poverty in adulthood

In this section, we examine the extent to which those who grew up in poverty also experience poverty in adulthood. Figures 1 and 2 present adult poverty experience of people who experienced poverty at different frequencies in childhood. Each respondent is classified in to one of four categories based on the proportion of times family incomes fell below 150% of the poverty line: no poverty, in poverty less than a third of times, in poverty between 1/3rd-2/3rd of the time, and in poverty more than 2/3rd of the times surveyed. These are done for three periods – when the respondent is a child below age 18, an adult over 18 and an adult over age 25.

As can be seen in the Figure 1, there is a strong relationship between childhood experiences of poverty and experiences of poverty in adulthood. Of those who never experienced poverty in childhood, 60% have also not experienced it as an adult by last observation above the age of 18. In addition, only 2% in this group experienced poverty more than 2/3rds of the time in adulthood. On the other hand, of those who experienced poverty 2/3rd or more of the time as children, 42% were in poverty more than 2/3rds of the time in adulthood and only 6% experienced incomes that are above the 150% of the
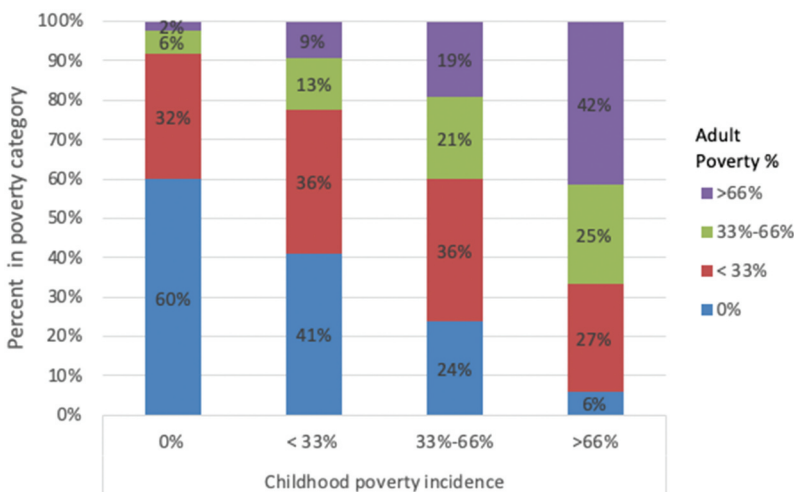

Figure 1. Poverty experience in adulthood (age 18 or older) by childhood poverty incidence.

federal poverty threshold *(150PT)* at all times that they were surveyed. The percentage reporting no poverty in adulthood shrinks as the intensity of childhood poverty increases.

In Figure 2, we look at the persistence of poverty excluding the period of early adulthood between the ages of 18–24. The percentage reporting no-poverty rose for each of the childhood poverty incidence categories. For example, among those who experienced childhood more than 2/3rds of the time, 25% reported no-poverty post age 25 while only 6% reported no-poverty post age 18. The percentage who experience poverty 2/3rd or more of the times in adulthood also drops from 42% to 35%. Those who experienced no poverty in childhood also become even less likely to experience it – 72% have no poverty experience after 25 as compared to 60% when 18–25 is included.

Persistent adulthood poverty (> 2/3rd of observations) is fairly rare for those who grow up in no-poverty households. Only 2–5% of the no-childhood -poverty group experience persistent poverty in adulthood depending on the age cutoff. In contrast, 35–42% of those who grew up in persistent poverty experience persistent adulthood poverty. Those who experience no poverty in childhood are more likely to experience no poverty in adulthood, while those who experience poverty at higher rates in childhood also have a higher rate of poverty in adulthood. Childhood poverty appears more strongly associated with the young adult years, however, the general connection between childhood poverty and adult poverty remains even after age 25.

Further, even though the percentage experiencing no-poverty in adulthood increases with age, much of this gain is achieved through a reduction in those who experience poverty less than a third of the time. Those that were deeply in poverty don't see as much change overall. Figure 3 shows the percentage of people falling in each poverty category above age 18 and 25. The percent of all adults who experience no-poverty rises from 36% at age 18+ to 52% at age
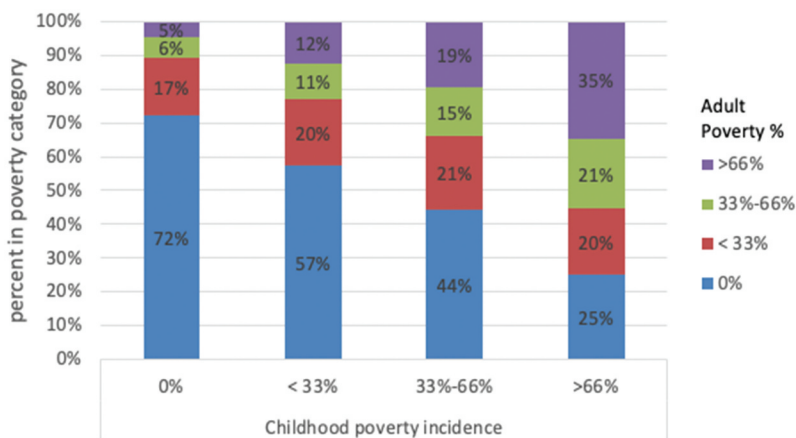

Figure 2. Poverty experience in adulthood (age 25 or older) by childhood poverty incidence.
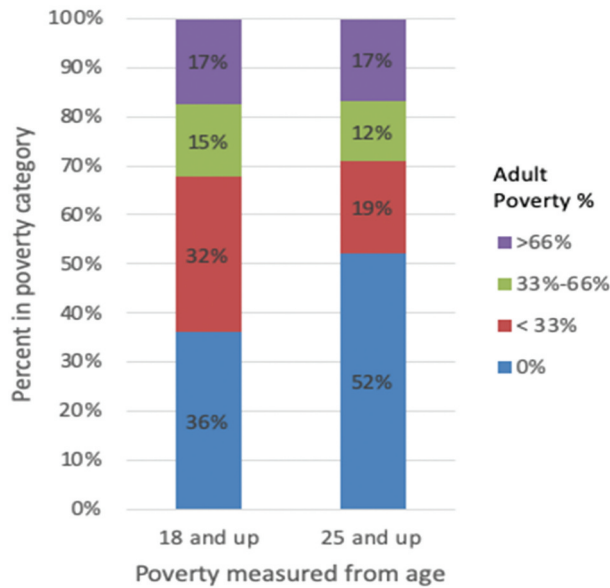
Figure 3. Transitions in poverty experience in adulthood.

25 +. Much of this is accounted by the decline in those that experience transient poverty (< 1/3rd of the time) shrinking from 32% at age 18+ to 19% at age 25 + . The percentage reporting persistent poverty remains at 17% whether we observe it at the cutoff age of 18 or 25. The percentage experiencing poverty 1/3rd-2/3rd shrinks only by 3%.

Taken together, these numbers show that adult poverty status is strongly connected to childhood experiences. People tend to do better with age, but its impacts are limited. Whether we look at the aggregated images in Figure 3 or those in Figures 1 and 2, much of the shift with aging is happening because people who experience some poverty in young adulthood (< 1/3rd) tend to do better with age. For those experiencing poverty more than a third of the time, age does not moderate outcomes as much.

Economic outcomes in adulthood appear far from random and seem pre-conditioned on the family that one is born into. Those born into families who never experienced poverty are likely to never experience it as adults, while those born into a family in persistent poverty, were more likely to re-live that experience in adulthood. In short, both poverty and economic success are transmitted intergenerationally and childhood experiences persist into adulthood, though the effects tend to be moderated by age. In the next section, we more systematically examine the relationship between childhood experiences of poverty and those in adulthood.

The persistence of poverty in adulthood

The previous section showed the aggregate relationship between childhood and adult poverty. At the individual level, there are variations in adult poverty outcomes with some faring better than others in their adult experiences. In this section, we are interested in determining what variables explain these better outcomes. Similar to the earlier analysis, we measure the persistence of poverty as the proportion of time family incomes were below the *150PT*. Persistence of poverty is measured in childhood before the age of 18 (P_{b18}), at age 18 or greater (P_{a18}), and at age 25 or later (P_{a25}). We employ a random effects model to estimate the impact of personal, extended family, neighborhood, and time period variables on the persistence of adult poverty after age 18 and after age 25 (P_{a18} and P_{a25}).

As we discussed in the introduction, we test three hypotheses with our models: (i) the persistence of poverty in childhood directly affects the persistence of poverty in adulthood, (ii) that there are period effects, which signal conditions of the overall economy, that can moderate the intensity of adulthood poverty experiences, and, (iii) familial factors (e.g., family network effects, multigenerational effects) moderate the probability of better outcomes for members of the same family, while controlling for other personal and place variables.

The structure of our data is such that it is clustered along several familial, geographic, and time period variables. As indicated earlier, each individual in the PSID data is connected to an original 1968 family. Since the data includes multiple generations, multiple individuals linked to the same original family unit are present in the data and are observed at different time points. We assume that individuals from the same original family are similar to one another within the family group than with those outside. Consequently, we employ a model with family random effects to examine adult poverty at the two age cutoffs, allowing us to examine differences across families. Second, each individual joins the labor force at some given time where the economy and overall social-cultural milieu is similar. We pick up these time period effects by dividing people into cohorts based on when they turned 18 years of age as pre-1980, 1980–1989, 1990–1999, and 2000. These cohorts respectively make 24.4%, 30.3%, 25.2%, and 20.1% of the post-age-18 data.

In addition to the family and period effects, we also control for neighborhood characteristics using the tract average income. Neighborhood variables are measured at the census tract level and rely on census data that is closest to the PSID data year. Because an individual could have moved during the period of observation in childhood, or because the characteristics of an area could change over time, place-based variables are represented by their average over the period of observation. Here we use the average tract income for the respondent's reported residential census tracts before reaching age 18. This variable is meant to pick up the effect of place on later outcomes.

Individual level factors that we control for are the persistence of childhood poverty, race, age at last observation, sex, highest education achieved, highest education achieved by the respondent's mother, whether the person was ever married and whether the person was ever jailed. The models for adulthood poverty after 18 (P_{a18}) and adulthood poverty after 25 (P_{a25}) are given in Table 2.

Extended/multigenerational family effects

The standard deviation of the random effects for families shows substantial variation in both models. Figure 4 shows these random effect estimates for each family unit for the two models separately. The estimates indicate that individuals belonging to some extended family units on average collectively experience higher rates of adulthood poverty. While these extended family effects are centered at zero for a majority of the observations, for some families, these effects add as much as an average 20% change in the expected adult poverty rate. In all about 8% of the subjects in our data (8.4% in the 18+ model and 7.9% in the 25+ model) have random effects estimates that are greater than 2 standard deviations from the mean of zero. This corresponds to about 4% of the families in our data. Another set of families have a collective extended family effect that is negative and large in magnitude. The random effects estimates are lower by more than 2 standard deviations from the mean for about 3% of the subjects in the data (2.9% in the 18+ model and 3.5% in the 25+ model), corresponding to

Table 2. Random effects models with clustered errors for the persistence of poverty in adulthood.

		Age 18 plus		Age 25 plus	
		Coefficient		Coefficient	
% times in poverty before age 18	PB18	0.28	***	0.18	***
Education level = High school	EdHS	−15.98	***	−18.76	***
Education level > High school	EdGHS	−25.15	***	−30.08	***
Sex (1 = Male)	Sex	−7.10	***	−7.81	***
Black (1 = Yes)	Black	7.77	***	8.38	***
Ever jailed (1 = Yes)	Jail	10.49	***	14.17	***
Mother's ed = High school	MomHS	−4.76	***	−4.72	***
Mother's ed > High school	MomGHS	−4.06	***	−2.94	
Ever married	Marr	−9.38	***	−13.37	***
Age (at last observation)	Age	−0.13	***	−0.13	**
Tract average income	TIB18	−0.07	***	−0.08	***
Constant	Constant	54.50	***	62.89	***
Number of observations		4616		4241	
Number of families		1,497		1,448	
Family random effect std. deviation (σ_u)		7.84		7.21	
Error standard deviation (σ_e)		20.81		27.48	
ρ (fraction of variance due to u_i)		0.12		0.06	
R-square:	within	0.15		0.11	
	between	0.56		0.39	
	overall	0.50		0.34	

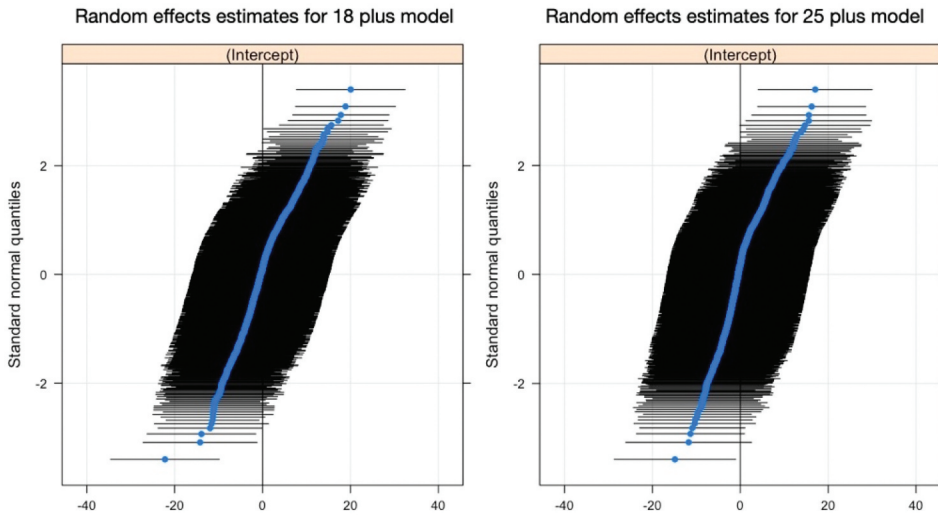Significance: *** < 0.01, ** < 0.05

Figure 4. Family random effects estimates in the 18+ and 25+ models.

about 1.9% of families in our data. Large family effects appear more pronounced at the right side of the distribution where individuals in the same extended family are unable to escape the cycle of poverty.

As we discuss below, childhood poverty, which is determined based on the income of the parents of the child, is an important variable in predicting poverty in adulthood. The extended/multigenerational family effect, when present, combines both multigenerational and lateral extended family similarities in poverty outcomes. Gans (2011) argues that little is known about multigenerational poverty but hypothesizes its presence. The findings here suggest that multigenerational/extended family impacts appear to be strong only for some families. The reasons for these cannot be determined from this analysis.

Childhood poverty

Childhood poverty intensity is measured as a function of parenal income when the analysis person was below the age of 18. In contrast to the extended/multigenerational poverty impacts, childhood poverty intensity is a strong predictor of adult poverty. There is 0.28% and 0.18% increase in poverty in adult, after 18 and 25 respectively, for each percent increase in poverty experience in childhood after controlling for family and other individual socio-demographic variables. The effect of the association of childhood poverty gets smaller when the young adult years are excluded. Never the less, even controlling for variables such as education, the variable's importance persists.

Individual variables

Both models show a strong effect of education. Those who completed high school had a 16%-18% lower rate of adulthood poverty depending on the model. Those whose education level was above the high school level had a 25%-30% lower estimate of poverty incidence in adulthood. Mother's education level was also an important variable in explaining adulthood poverty. Those whose mothers completed at least high school reported adulthood poverty rates that were on the order of 4–5% less than those whose mother's education was below high school. Large differences were not observed between those whose mothers had completed high school or had gone beyond that level.

Race and sex were also important in explaining differences in adulthood poverty. Black respondents reported about 8% higher rate of poverty in adulthood than White respondents. The rate of adulthood poverty for men was lower by about 7%. Those who had been married at least once in adulthood had lower incidences of adulthood poverty, likely arising from the presence of multiple earners during the period the marriage is in effect. The effect is larger when we consider adulthood poverty after age 25 (a 9% vs. 13% reduction). Because our data is aggregated over multiple years, we cannot discern if this effect persists in cases where marriages dissolve. However, it appears that people who get married at least once on average experience poverty less than those that don't. Those who had been jailed at least once had a 10% (14% for 25+ model) higher incidence of poverty in adulthood than those that have not.

Finally, age at last observation was an important variable in both models. The proportion of time in poverty declines by 0.13% for each additional year in age at last observation.

Neighborhood and period variables

The models also controlled for the effect of the average household income across neighborhoods (tracts) that the individual lived in prior to turning 18. In both models the estimates for this variable are negative, indicating that a $1,000 rise in the average tract household income is associated with a reduction in adulthood poverty between 0.07%-0.09%. To the extent that higher tract incomes are associated with better neighborhood conditions, the data suggests a positive association with lower adulthood poverty. However, the magnitudes of impact are small. The estimates imply a 1% reduction in adulthood poverty experience after age 18 would need a $14,000 increase in tract average income. The magnitudes are also much smaller than what could be gained from education, avoiding jail, or percentage reductions in childhood poverty.

We had also hypothesized that the period at which one starts to participate in the labor force maybe an important predictor of adulthood poverty experiences. However, in both models the decade in which the respondent turned 18 were statistically insignificant.

Discussion

The foregoing analyses highlights the influence of extended family on the adult poverty experience of children. Across the families in this data, there is considerable variation in the family-effect on poverty incidence in adulthood. Despite the branching of families in successive generations in the PSID, the models suggest that for some families there remain common factors that either increase or dampen the persistence of poverty in adulthood. While most family effects were not statistically different from zero, there were more families in the data where the family effect amplified poverty experiences than dampened it. It suggests that members of some families tend to sink together suggesting strong multigenerational or network effects that lead to collectively similar experiences.

Second, there is a clear relationship between the persistence of childhood poverty experience and adult poverty experience. Higher incidence of poverty in childhood, a circumstance not in the control of the child, continues to negatively impact outcomes into adulthood, and particularly so during the period of early adulthood. While it is encouraging that the impact of childhood poverty appears to decline with age, it does not disappear.

Third, the results are consistent with a range of earlier studies that identify the effects of education and avoiding crime in reducing the incidence of poverty in adulthood. While the models reinforce the importance of education in reducing the incidence of poverty in adulthood, poverty outcomes show substantial difference by race even when individuals are at the same education level. Blacks at the same level of education as Whites tended to experience poverty more frequently in adulthood than whites. Factors including racial bias, discriminatory practices in workplaces, and differing levels of social capital by race may account for some of these differences. Variables such as mother's education, marriage, and sex were also important predictors of adulthood poverty experiences.

Fourth, our examination of neighborhood place variables shows mixed results. We find that after controlling for extended family and other individual effects, the neighborhood conditions in an area where one grew up (measured as the income in the census tract) was associated with modest declines in adult poverty experience. Finally, time period effects do not appear to be important.

While our analysis uses the 150% of federal poverty line as a measure of economic well-being, the metric has several shortcomings (National Research Council, 1995). The thresholds, set as a multiple of food consumption

estimates in the 1960s and adjusted for inflation, may be too low given the structure and needs of today's families. The measure is also criticized for not taking into account cost of living difference across places. While we have used 150% of the federal threshold and accounted for price differences across place in our analysis, these may not be sufficient to capture all families who experience poverty. Further, more expansive definitions of wellbeing are also possible that incorporate social, political and other forms of disadvantage (see for example, Madanipour et al., 2015).

These findings suggest that interventions are possible to lower the persistence of poverty in adulthood. Some of these can be focused on income transfers which can reduce the years lived in poverty in childhood, which in turn may lower the incidence of adult poverty experiences, and have ripple effects on successive generations. Second, there is a clear effect of education, and programs that seek to address high school completion can have substantial impact on the persistence of poverty in adulthood. In conjunction with this, there is a need to address the underlying causes that lead to inequality in poverty outcomes by race even when education levels are the same. Finally, the results also suggest that further examination is needed for why some extended families tend to sink together in terms of adulthood poverty experiences.

Disclosure statement

Funding

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References

Anderson, M. (1978). *Welfare: The political economy of welfare reform in the United States* (Vol. 181). Hoover Press.
Becker, G. S., & Tomes, N. (1986). Human capital and the rise and fall of families. *Journal of Labor Economics*, *4*(3, Part 2), S1–S39. https://doi.org/10.1086/298118
Becker, G. (1981). *A treatise on the family* (Vol. 30). Harvard University Press.
Brooks-Gunn, J., & Duncan, G. J. (1997). The effects of poverty on children. *The Future of Children*, *7*(2), 55–71. https://doi.org/10.2307/1602387

Corcoran, Mary, Adams, Terry, et al. (1997). Race, sex, and the intergenerational transmission of poverty. In Duncan, Greg J., and Brooks-Gunn, Jeanne (Eds.), *Consequences of Growing Up Poor*, 462-517. New York, NY: Russell Sage Foundation, , chapter 15.

Cutler, D. M., & Glaeser, E. L. (1997). Are ghettos good or bad? *The Quarterly Journal of Economics*, *112*(3), 827–872. https://doi.org/10.1162/003355397555361

Duncan, G. J., Brooks-Gunn, J., & Klebanov, P. K. (1994). Economic deprivation and early childhood development. *Child Development*, *65*(2), 296–318. https://doi.org/10.2307/1131385

Evans, G. W. (2004). The environment of childhood poverty. *American Psychologist*, *59*(2), 77. https://doi.org/10.1037/0003-066X.59.2.77

Gans, H. J. (2011). The challenge of multigenerational poverty. *Challenge*, *54*(1), 70–81. https://doi.org/10.2753/0577-5132540104

Haveman, R., Wolfe, B., & Spaulding, J. (1991). Childhood events and circumstances influencing high school completion. *Demography*, *28*(1), 133–157. https://doi.org/10.2307/2061340

Institute for Social Research. (2015). *Panel study of income dynamics, restricted use data, 1968–2011*. Produced and distributed by the Survey Research Center.

Jencks, Christopher, & Mayer, Susan. (1990). The Social Consequences of Growing Up in a Poor Neighborhood, In Lynn, Laurence, and McGeary, Michael (Eds.), *Inner-city Poverty in the United States*. Washington, D.C.: National Academy Press.

Madanipour, A., Shucksmith, M., & Talbot, H. (2015). Concepts of poverty and social exclusion in Europe. *Local Economy*, *30*(7), 721–741. https://doi.org/10.1177/0269094215601634

Mead, L. (1986). *Beyond entitlement: The social obligations of citizenship*. Free Press.

Murray, C. (2008). *Losing ground: American social policy, 1950–1980*. Basic books.

National Research Council. (1995) . *Measuring poverty: A new approach*. National Academies Press.

Rank, M. R., & Hirschl, T. A. (1999). The likelihood of poverty across the American adult life span. *Social Work*, *44*(3), 201–216. https://doi.org/10.1093/sw/44.3.201

Reardon, Sean F. (2011). The Widening Academic Achievement Gap Between the Rich and the Poor: New Evidence and Possible Explanations. In Duncan, Greg J., and Murnane, Richard J. (Eds.), *Whither Opportunity?: Rising Inequality, Schools, and Children's Life Chances*, New York, NY: Russell Sage Foundation, (pp. 91–116). http://www.jstor.org/stable/10.7758/9781610447515.10 .

Sampson, R. J., Morenoff, J. D., & Gannon-Rowley, T. (2002). Assessing 'neighborhood effects': Social processes and new directions in research. *Annual Review of Sociology*, *28*(1), 443–478. https://doi.org/10.1146/annurev.soc.28.110601.141114

Semega, J. L., Fontenot, K. R., & Kollar, M. A. (2017). *Income and Poverty in the United States: 2016*, P60-259. Washington, D.C.: U.S. Government Printing Office. https://www.census.gov/content/dam/Census/library/publications/2017/demo/P60-259.pdf

Sharkey, P., & Elwert, F. (2011). The legacy of disadvantage: Multigenerational neighborhood effects on cognitive ability. *American Journal of Sociology*, *116*(6), 1934–1981. https://doi.org/10.1086/660009

Sharkey, P. (2008). The intergenerational transmission of context. *American Journal of Sociology*, *113*(4), 931–969. https://doi.org/10.1086/522804

Wilson, W. J. (1987). *The truly disadvantaged*. University of Chicago.

Wilson, W. J. (2012). *The truly disadvantaged: The inner city, the underclass, and public policy*. University of Chicago Press.