Net Worth Poverty and Child Development

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Abstract

The authors investigate whether net worth poverty (NWP) reduces children’s well-being. NWP—having wealth (assets minus debts) less than one fourth of the federal poverty line—is both theoretically and empirically distinct from income poverty (IP) and is the modal form of poverty among children. Data come from the Panel Study of Income Dynamics and its Child Development Supplement on children ages 3 to 17 years observed between 2002 and 2019. The authors use linear mixed-effects models to investigate the associations among NWP, IP, and four cognitive and behavioral outcomes. NWP reduces children’s cognitive scores and was associated with increases in both problem behavior scores. Negative associations for NWP are similar in magnitude to those found for IP. Much of the NWP effect operates through asset deprivation rather than high debt. The results illustrate the potential risks many children, previously overlooked in studies of IP, face because of wealth deprivation.

Keywords

poverty; wealth; child well-being

Wealth deprivation, or net worth poverty (NWP), is among the least well understood social problems in the United States today despite potentially having high societal costs. NWP is an indicator that a household’s stock of resources is insufficient to smooth consumption, to address unexpected crises such as a medical emergency or natural disaster, or to provide for children in the event of an income interruption. The problems associated with wealth deprivation were evident during the coronavirus disease 2019 (COVID-19) pandemic, when many households suddenly lost incomes and were unable to pay for necessities such as food and housing.

In the United States, poverty is typically measured by comparing household income with the federal poverty thresholds; that is, income poverty (IP) indicates that a household’s income (i.e., its flow of resources) is insufficient to cover basic needs. NWP complements IP by considering saved assets and expanding the conception of poverty to include a household’s stock of resources. NWP is defined as household net worth (or wealth) that is less than one...
fourth of the federal poverty line (Haveman and Wolff 2004): less than $6,562 for a family of four in 2020.

The distinction between NWP and IP builds on research showing considerably greater wealth inequality than income inequality for households with children, with the least wealthy households having greater debt than assets (Gibson-Davis and Hill 2021; Gibson-Davis and Percheski 2018). Over the past 40 years, NWP has been increasing even as IP has declined, with one third of American households with children in 2019 experiencing NWP (Gibson-Davis, Keister, and Gennetian 2021). Although it seems logical that NWP would have negative consequences, previous research has not examined the specific effects of wealth deprivation on children.

A major cause of concern regarding the high (and rising) rates of NWP is the potential risk NWP poses to child well-being.\(^1\) Wealth promotes child well-being because it facilitates investments in children, provides a psychological and financial hedge for the costs and anxieties of child rearing, speaks to class membership, and informs parental and child expectations about the future (Gibson-Davis and Hill 2021; Williams Shanks 2007). Wealth levels are positively correlated with children’s academic, behavioral, and health outcomes (Boen, Keister, and Graetz 2021; Miller et al. 2021), and large disparities in outcomes are evident for children at the bottom of the wealth distribution compared with those at the top (Pfeffer 2018; Yeung and Conley 2008). Although untested, we propose that wealth deprivation, not just low levels of wealth, can have adverse consequences for child well-being.

Although wealth and income are likely to be associated with child well-being in similar ways, they are not substitutes for each other (Kennickell 2009; Miller et al. 2021). Wealth and income are only modestly correlated in families with children (0.50; Gibson-Davis and Hill 2021), and they represent distinct streams of resources. Income is the flow of cash coming into a household (e.g., labor market earnings), whereas wealth is a stock. That is, wealth is a household’s assets (such as home equity) minus debts (credit card, education loans, etc.). Given that it is a stock rather than a flow, wealth allows parents to invest in children in the face of unexpected economic shocks and is a cumulative resource that expresses and determines class status. Previous work suggests that wealth’s associations with child well-being are statistically robust to the inclusion of income, and thus the influence of wealth on child well-being may be capturing something different from the influence of income (Grinstein-Weiss, Williams Shanks, and Beverly 2014; Jez 2014). The experience of either wealth deprivation or income deprivation is cause for concern, and the experience of both may pose particular risks for children’s development.

We propose that a full accounting of children’s economic precarity should include both NWP and IP. To address this gap in the literature, we focus on NWP’s association with children’s well-being and consider how NWP and IP independently and jointly interact in their associations with cognitive and behavioral outcomes. Data come from the 2002–

\(^1\)Here and throughout the remainder of the text we refer to “child development,” “child well-being,” and “child outcomes” interchangeably to acknowledge the inter- and multidisciplinary nature of characterizing the child achievement and socioemotional measures examined in this study.
2019 waves of the Panel Study of Income Dynamics (PSID) and its Child Development Supplement (CDS), large-scale data sets containing sufficient detail to construct NWP and IP measures and link them to validated measures of children’s developmental outcomes. We use linear mixed-effects models of 10,523 person-year observations of children aged 3 to 17 years to estimate how NWP and IP are associated with reading, math, and internalizing and externalizing behavioral outcomes. We classify children into four mutually exclusive poverty categories: (1) neither NWP nor IP, (2) NWP but not IP, (3) IP but not NWP, and (4) both NWP and IP. Our final analysis addresses potential heterogeneity in the association between NWP and child well-being, depending on whether a household’s NWP status reflects the absence of assets or the presence of debts.

Our study makes several contributions to the literature. First, we build on research that calls for a broader concept of economic precarity (Addo 2014; McLoyd 1990; Pfeffer and Schoeni 2016) to provide estimates of the association between NWP and child well-being. Although studies have investigated how wealth levels are related to child well-being (Conwell and Ye 2021; Miller et al. 2021; Yeung and Conley 2008), we are not aware of any extant study that has focused on wealth deprivation or codified the absence of wealth as a risk factor for child well-being. Second, by classifying children into four poverty categories, we differentiate the variance in child well-being unique to NWP and compare its magnitude with that of IP. We also identify whether the joint NWP-IP status is associated with larger deficits in child well-being relative to children who experience either NWP or IP singularly. Third, we investigate the relative role of assets and debts in the association between NWP and child outcomes. Wealth deprivation could reflect the absence of assets or the presence of debt, with potentially different implications for child well-being (Berger and Houle 2016, 2019; Grinstein-Weiss et al. 2014; Williams Shanks and Destin 2009). Finally, we demonstrate the utility of using a measure of wealth deprivation that is tied to federal poverty thresholds to assess the well-being of children. With a definition of NWP in hand, social scientists and policy scholars could revisit the association between wealth and child well-being and begin to develop a deep knowledge base (like that for IP) regarding the relationship between wealth scarcity and child well-being.

**Net Worth Poverty**

NWP assesses whether household net worth is less than one fourth of the federal poverty line, adjusted for family size and composition (Brandolini, Magri, and Smeeding 2010; Gibson-Davis et al. 2021). According to this definition, a household experiencing NWP does not have sufficient resources to maintain an adequate standard of living for at least three months. In 2020, a two-adult, two-child household was considered poor if the total household income was less than $26,246 (U.S. Census Bureau 2021). The same household would be net worth poor if its net worth was less than $6,562. The most recent evidence available suggests that roughly one quarter of American adults were net worth poor in the early 2000s, representing a slight increase from the early 1980s (Brandolini et al. 2010; Caner and Wolff 2004; Haveman and Wolff 2005). For children, 35 percent of child households were net worth poor (Gibson-Davis et al. 2021). Predictors of NWP include education level, marital status, and race and ethnicity (Haveman and Wolff 2004, 2005). In 2019, substantially higher fractions of Black (56 percent) and Latino (49 percent) children’s
households experienced NWP, relative to White children’s households (22 percent) (Gibson-Davis et al. 2021).

The definition of NWP has its limitations. The three-month period used to define NWP is arbitrary. Research suggests, though, that a three-month time frame may correspond to the amount of savings displaced when a household suffers an income shock (Brandolini et al. 2010). Moreover, like IP, NWP is an absolute measure, and a relative measure might be preferred (Brady 2003). NWP can also be calculated using different components of wealth, for example, how many assets a household has, whether those assets are liquid or nonliquid, and whether the definition of assets includes or excludes the value of home equity. As explained in further detail below, we use multiple definitions of NWP (e.g., defined relative to liquid assets, measuring it relative to the bottom 25 percent of the wealth distribution) to ensure that our results are robust. While recognizing the limitations of the measure, our preferred specification uses NWP as it has been traditionally been defined (Gibson-Davis et al. 2021; Haveman and Wolff 2004, 2005). Additionally, an absolute rather than a relative measure is preferred, insofar as a relative measure would vary depending on the distribution of wealth observed in the data set. Given that most American data sets that observe wealth (including the PSID) do not capture the full wealth distribution, a relative measure may be problematic.

Among families with children, trends in NWP and IP have diverged. Between 1989 and 2019, NWP increased modestly, whereas IP rates fell (Gibson-Davis et al. 2021).

The divergence in trends between income and NWP over the past three decades underscores the need for definitions of economic precarity to encompass wealth deprivation. Between 1989 and 2019, child households in the bottom half of the income distribution accounted for a roughly constant share of all income, at about 14 percent. In contrast, the share of wealth owned by child households in the bottom half of the wealth distribution fell from 0.64 percent in 1989 to −0.36 percent in 2019 (Gibson-Davis and Hill 2021). Thus, although lower income households maintained their relative position in the income distribution from 1989 to 2019, lower wealth households experienced a decline in net worth, having greater debts than assets by 2019. These disparate trends in income and wealth indicate that markers of income-based poverty underestimate the difficulties faced by economically vulnerable households.

**Wealth and Child Development**

Drawing on a theoretical model developed by Gibson-Davis and Hill (2021), we propose that wealth deprivation is linked to child well-being in ways that both complement and exacerbate the effects of income deprivation. Akin to IP, the lack of wealth likely curtails parental investments in children and increases stress for both parents and children (Duncan et al. 2012; Gibson-Davis and Hill 2021; Magnuson and Votruba-Drzal 2009). In addition, wealth deprivation may pose its own risks for healthy child development.

First, during times of economic crisis, wealth allows parents to purchase goods and services that meet the consumption needs of their children (Boen et al. 2021; Sousa 2009; Yellen
Parents with sufficient liquid assets can afford high-quality childcare, educational resources, enhanced home learning environments, and other cultural experiences that contribute to educational attainment (Wachs and Evans 2010; Williams Shanks 2007). When facing economic challenges, such as the loss of income or an expensive medical emergency, households that cannot access government assistance necessarily reduce spending on these key child enrichment items (Lusardi, Schneider, and Tufano 2010; Rose 1999; Wall, Vujicic, and Nasseh 2012). Parents in NWP are unlikely to have a financial buffer during times of economic crisis, potentially compromising their ability to provide necessary investments to their children.

Second, wealth serves as a source of economic and psychological security, likely reducing parental stress and thereby promoting child well-being (Conger, Conger, and Martin 2010; Shapiro 2004). The security function of wealth arises in part because net worth is less attached to labor force participation than is income (Williams Shanks and Destin 2009) and therefore provides a buffer against unexpected changes in job status, earnings, or health crises (Shapiro 2004; Sherraden 1991). Having chronically insufficient assets, experiencing a sudden shock to assets, or having high debt can lead to high levels of parental anxiety, hopelessness, and frustration (Boen, Keister, and Aronson 2020; Drentea and Reynolds 2015). Because wealth provides a buffer against income loss and instability, it may be as effective as predictable income flows at reducing parental stress about finances (Gennetian and Shafir 2015). NWP may increase parents’ feelings of subordination and lack of control regarding important life decisions (Cutler, Lleras-Muney, and Vogl 2008) and reduce their ability to manage risk and uncertainty associated with household finances (Barr 2012; Blank and Barr 2009; Conger and Elder 1994).

Third, wealth both determines and expresses class status (Conley 1999), which in turn influences the subjective experience of social and economic position, opportunity, and belonging. Class status shapes how individuals, including children, are treated and perceive themselves, thereby influencing behavior and academic achievement (Destin et al. 2012; Mistry et al. 2015; Shutts et al. 2016). Children in a social higher class family may grow up in environments that model and help them navigate and acquire skills that undergird future success. For example, it is more likely that a child in an upper class family will learn about college admissions and high-paid careers that require advanced degrees (Lareau 2003). Parents who are net worth poor may perceive themselves as lower class, reducing their feelings of self-reliance, self-efficacy, and social belonging, potentially undercutting their effectiveness as parents (Sherraden 1991).

Fourth, wealth speaks to the “construction of future possibilities” (Sherraden 1991:152), or parents’ and children’s internalized expectations for possible life outcomes. These expectations may influence parental investments and shape children’s aspirations regarding college attendance, occupational possibilities, and other goals (Destin and Oyserman 2009; Diemer, Marchand, and Mistry 2020; Zhan and Sherraden 2003). Parental expectations can mediate the relationship between wealth and children’s educational attainment (Elliott, Destin, and Friedline 2011; Vera-Toscano, Ateca-Amestoy and Serrano-Del-Rosal 2006) and may be a stronger explanatory factor for the effects of wealth on children’s educational attainment than are direct parental investments (Diemer et al. 2020). NWP may also
decrease parents’ optimism for intergenerational economic opportunity and mobility (Yeung and Conley 2008), potentially leading parents to underinvest or make suboptimal investment choices for their children.

Consistent with these theoretical mechanisms, wealth levels are positively associated with educational attainment, academic achievement, and socioemotional functioning (Conwell and Ye 2021; Diemer et al. 2020; Grinstein-Weiss et al. 2014; Williams Shanks 2007). Net worth has particularly strong associations with educational attainment (Conley 2001; Doren and Grodsky 2016; Jez 2014; Karagiannaki 2017): children of the wealthiest parents are more than 40 percentage points more likely to graduate from college than children from the least wealthy families (Pfeffer 2018). For children younger than 18 years, parental wealth is positively correlated with standardized test scores and academic achievement (Friedline, Masa, and Chowa 2015; Miller et al. 2021; Moulton et al. 2021; Yeung and Conley 2008). Children with wealthier parents also have higher sociability and fewer behavioral problems (Diemer et al. 2020; Ream and Gottfried 2019). Reflecting the theoretical and empirical distinctiveness of net worth and income (Gibson-Davis and Hill 2021), associations between wealth and child well-being are robust to the inclusion of income (Jez 2014; Miller et al. 2021; Williams Shanks 2007). Despite these important findings, previous research has not investigated how NWP is related to child well-being.

Given that wealth deprivation is likely to be negatively associated with child development (Conwell and Ye 2021; Moulton et al. 2021), we hypothesize that children who experience NWP, relative to those who are not income or wealth poor, will experience qualitatively worse outcomes. Furthermore, because wealth is a complement to, but not a substitute for, income (Diemer et al. 2020; Miller et al. 2021), we believe that NWP potentially poses risks for children apart from any risks posed by IP. Given the likely complementary relationship between income and wealth on child outcomes (Gibson-Davis and Hill 2021), we also anticipate that children who simultaneously experience wealth and income deprivation may be at a heightened risk. Finally, on the basis of previous work showing the salience of wealth for both cognitive and behavioral outcomes (Conwell and Ye 2021; Ream and Gottfried 2019), we anticipate that NWP will be negatively related to both sets of outcomes. Estimates may be larger for reading and math scores relative to problem behavior measures, given that previous work has suggested that economic deprivation has more robust associations with cognitive development than with psychosocial well-being (National Academies of Sciences, Engineering, and Medicine 2019).

Components of NWP

NWP could reflect two different financial situations: households whose assets fall below the poverty line or households whose assets exceed the poverty line but whose debts push their net worth below the poverty line. To illustrate the difference, consider two families of four, each with wealth levels of $6,000. Both families are net worth poor. Family A has total assets of $6,000, meaning that regardless of their level of debt, their assets are insufficient to bring them above the NWP line (they are “asset poor”). Family B has total assets of $10,000 and total debts of $4,000. Family B’s assets place them above the poverty line, but their debts bring them below the poverty line (they are “debt poor”).
These two situations may inform associations with child outcomes, although it is unclear whether one situation is theoretically more likely to put children at risk. Children in asset-poor families may be at risk because their parents have no economic buffer and cannot provide even a minimal level of goods (Grinstein-Weiss et al. 2014). Moreover, parents who are asset poor may have limited few options for securing low-interest or interest-free credit and may be more susceptible to predatory lending, potentially limiting their ability to invest in their children (Barr 2012). In contrast, debt-poor families may have some economic cushion (albeit one informed by debt levels) and can potentially use their assets to leverage credit markets to invest in higher education, enrichment activities, and safer neighborhoods. Debt-poor families may also either be, or perceive themselves to be, of higher social class than asset-poor families, insofar as debt-poor families may have acquired the goods and markers associated with a middle-class lifestyle.

On the other hand, the presence of debt may also pose a unique risk for child well-being (Berger and Houle 2019; Nepomnyashchy et al. 2021). The mental burden of owing money and dealing with collection agencies (so-called debt stress; Dunn and Mirzaie 2016) increases anxiety and diminishes psychosocial well-being (Drentea 2000; Drentea and Reynolds 2015). Having high levels of debt also signifies that resources need to be directed toward paying down debt and cannot be used to meet the needs of children. Parents may also need to direct time and energy to managing debt payments and have less time to devote to their children. Not all debt is created equal; secured debt (such as mortgage loans) or debt that is anticipated or expected may be less harmful for children than unsecured debt or debt that is taken out in a time of crisis (Berger and Houle 2016; Conwell and Ye 2021; Nepomnyashchy et al. 2021). Debt may therefore be particularly disadvantageous for children in economically fragile families, which may be disproportionately likely to take out unsecured debt to meet immediate consumption needs (Berger and Houle 2019; Charron-Chénier 2018).

It difficult to know, a priori, if one type of NWP will be associated with worse outcomes than the other. Previous scholarship supports the negative effects of both asset deprivation and high debt for child and youth well-being (Addo, Houle, and Simon 2016; Berger and Houle 2019; Deckard, Goosby, and Cheadle 2021; Fang et al. 2020). We compare the relative effects of both asset and debt poverty to further understanding of how asset and debts account for the negative effect of NWP.

Methods

We use data from 2002 to 2019 from (1) the PSID, the longest running longitudinal survey of individuals and families in the United States, and (2) the CDS, a supplemental survey of PSID children. We use the PSID and CDS as they are only large data sources of which we are aware that observe wealth and child well-being on a contemporary cohort of children. Children from the National Longitudinal Survey of Youth 1979 have largely aged out of childhood (e.g., in 2016, only 455 children were aged 3–17 years). Additionally, beginning in 2000, the National Longitudinal Survey of Youth assessed wealth every 4 years, introducing a long lag between wealth and child data collection.

The PSID and CDS have been used extensively to study the associations between economic

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well-being and child outcomes (Duncan, Kalil, and Ziol-Guest 2017; Pfeffer 2018; Yeung and Conley 2008).

The CDS has used two sampling strategies over its duration, beginning with a cohort sampling model: the first three waves included up to two randomly selected children per household who were aged 0 to 12 years in 1997 (CDS I), with follow-ups of these children in 2002–2003 (CDS II) and 2007–2008 (CDS III). By the 2014 wave, all the children from the CDS I to III had aged out of the study. The CDS thus switched the sampling strategy for the 2014 and 2019 waves to include all children in the PSID aged 0 to 17 years, with full in-home assessments for 50 percent of PSID households containing children. Because of the lag between the CDS I (1997) and the nearest wave of wealth data (1994), we omit the CDS I from our analytic data set. Our data set thus contains information on children observed in 2002–2003, 2007–2008, 2011, and 2019.

To create the sample, we pair data from CDS II and III, CDS 2014, and CDS 2019 with the closest corresponding PSID wave containing income and wealth data (i.e., we pair CDS II with PSID 2001, CDS III with PSID 2007, and so on). We limit the sample to all children aged 3 to 17 years with at least one nonmissing value for any outcome measure and families containing nonmissing values for wealth and income. For the 2019 CDS, we use early-release data, which contain information on behavioral outcomes but not on cognitive outcomes. We also limit the sample to children who had home visits before March 13, 2020 (when in-person activities for the study were suspended because of COVID-19). Across CDS cohorts, the sample consists of 10,523 person-year observations of 7,798 unique children.

The key outcomes are two cognitive and two behavioral problem measures taken from the Woodcock-Johnson (WJ) Psycho-Educational Battery–Revised (Woodcock and Johnson 1989) and the Behavior Problem Index (BPI), respectively (Peterson and Zill 1986). We use broad reading and applied math problem scores from the WJ, and we use internalizing and externalizing behavioral problems from the BPI. Broad reading is a measure of reading fluency and passage comprehension, and applied problems assess math skill in the context of word problems. Internalizing behavioral problems include behaviors such as withdrawal, sadness, or anxiety; externalizing behavioral problems are behaviors such as aggression and belligerence. The CDS normalizes and age-standardizes these scores. The WJ and BPI are commonly used to assess how poverty is associated with achievement and behavior outcomes for children of various ages (Hair et al. 2015; Korenman, Miller, and Sjaastad 1995; Leventhal and Dupéré 2011).

As others have done (Pfeffer 2018; Pfeffer and Killewald 2018), we use the PSID’s imputed household wealth variable to measure wealth. This variable includes assets such as vehicles, stocks, real estate, and checking and savings accounts; it also includes a broad range of debt, including medical, legal, student, family loan, and credit card debt. The imputed wealth variable, however, does not include retirement assets, which are an important aspect of household wealth. Therefore, as done by Cooper, Dynan, and Rhodenhiser (2019), we link retirement asset data from each head of household and their spouse or partner to their
household’s imputed wealth. We converted wealth to 2019 dollars using the Consumer Price Index.

Likewise, we use the PSID’s imputed total family income measure, which includes wage and salary income as well as taxable and social security income from the reference person and spouse or partner, taxable and Social Security income from other family unit members, and transfer income. Transfer income includes cash transfers from welfare programs, such as Temporary Assistance for Needy Families, as well as unemployment compensation, worker compensation, child support, and financial support from relatives. We also converted income to 2019 dollars.

With these wealth and income variables, we then determine net worth and IP status. Both NWP and IP are defined relative to the 2019 poverty line (U.S. Census Bureau 2021). Following previous work (Brandolini et al. 2010; Haveman and Wolff 2004, 2005), we consider households to be net worth poor if their net worth (total assets minus total debts) is less than 25 percent of the federal poverty line, adjusted for family composition. In 2019, the poverty line for a household of four was $25,926 (U.S. Census Bureau 2021); a household would be net worth poor if their net worth was less than $6,482. Note that because we use constant dollars, we adjust for variation over time in wealth, income, and poverty thresholds. Sensitivity analyses (described later) examine the robustness of our results to alternative definitions and thresholds of NWP.

Our first set of analyses use dichotomous indicators of poverty status (e.g., 1 = net worth poor, 0 = otherwise). We then construct a joint poverty status measure, whereby households are divided into four mutually exclusive categories (not income or net worth poor, income poor only, net worth poor only, or both income and net worth poor).

Our final set of measures is a mutually exclusive, three-category division of NWP status: not poor, asset poor, or debt poor. Asset-poor households are those whose levels of assets are insufficient to bring them above the NWP line (these households may or may not have debts). Debt-poor households are those whose assets exceed the NWP threshold, but their levels of debt bring them below the NWP threshold.

Covariates include the child’s gender (male or female), the child’s age (3–6, 7–12, or 13–18 years), and whether the child is firstborn. Parental characteristics include categorical indicators for race/ethnicity (non-Hispanic White, non-Hispanic Black, Hispanic, and an “other” category for parents who do not fit in one of these categories), marital status (married [omitted], unmarried, divorced or separated, or widowed), education (no high school diploma [omitted], high school diploma, some college, and a bachelor’s degree or more), and age (measured continuously and squared). When two parents were present in a household, we used demographic characteristics of the PSID reference person, typically the man. We use parental race/ethnicity because of high rates of missing data for child’s race/ethnicity and because of the high overlap between parents’ and child’s race/ethnicity.

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3The CDS, for example, did not ask children younger than 12 years for their race/ethnicity. Race/ethnicity was missing for roughly one third of all children. Among nonmissing observations, approximately 92 percent of parents and children reported the same race/ethnicity.
The proportion of missing data on covariates is low: 93 observations are missing information on parental race/ethnicity (1 percent of the sample), and 331 observations are missing information on parental education (4 percent). We create binary indicators to measure missing data for each of these two variables and include them in our regressions. The other covariates have no missing data.

Table A1 in the Appendix displays weighted descriptive statistics for outcome variables and demographic covariates. For all years, the modal racial/ethnic category was White (59 percent), followed by Hispanic (18 percent) and Black (16 percent). Roughly two fifths of children in the sample were aged 7 to 12 years, with larger fractions of 13- to 17-year-olds than 3- to 6-year-olds. Roughly three quarters of children’s parents in the sample were married, and almost one third of the sample’s parents had at least a bachelor’s degree. Over time, the sample contained fewer White individuals, had a lower fraction of married parents, and had a higher fraction of parents with at least some college education.

We use growth-curve (also known as linear mixed-effects) models to estimate the longitudinal associations between NWP and IP status and outcome measures. In our data, some individuals are observed across multiple survey waves; in other words, these individual observations are nested within time. Because our panel is unbalanced—most children (65 percent) were observed only once, and the remaining 35 percent were observed twice—mixed-effects models are an ideal strategy for regression analysis. The main advantage of the mixed-effects method over other hierarchical methods is that it contains both fixed and random effects, allowing us to include fixed effects (or slopes) for a matrix of covariates in addition to random effects (or intercepts) for those individuals who are observed more than once. These random effects allow us to account for correlation in outcomes within individuals. The model is:

\[ Y_{it} = X_{it}\beta + \text{Poverty}_{it}\delta + Z_{it}\mu_i + \eta_i + \epsilon_{it}, \]

where \( X \) is a matrix of the covariates described earlier, \( \text{Poverty} \) is a matrix capturing poverty status, \( Z \) is a matrix for random effects at the individual level, and \( \eta \) is a vector of time-fixed effects. The subscript \( i \) corresponds to an individual, and the subscript \( t \) corresponds to time. Standard errors are clustered at the family level. For some estimates, we use equation 1 to generate predicted values in scores while holding covariates at their means. As robustness checks, we conducted models using a balanced panel (limiting the sample to children observed twice); results are presented in Table A4. We also used ordinary least squares regression on one year of data. Results, though having less power, were substantively the same as our main findings.

**Results**

**Experiences of NWP**

NWP is common among U.S. children (see Table A1). In 2019, 40 percent of children experienced NWP, more than three times the percentage of children who experienced IP (13 percent). The share of children experiencing NWP increased by roughly 10 percentage points between 2001 and 2019, whereas IP increased more modestly, rising by about 4
percentage points between 2001 and 2013 before returning to 13 percent in 2019. On net, the United States experienced 35 percent growth in the proportion of children in NWP in 2019 relative to 2001, whereas IP among children grew by only 6 percent.

The overlap between NWP and IP is high. A crosstabulation of NWP and IP indicates that of those who faced IP, 83 percent also faced NWP (results not shown but available upon request). Among those in NWP, 36 percent were also in IP.

Results for joint poverty status (see Figure 1) underscore the ubiquity of NWP. In 2019, 29 percent of the sample experienced NWP, and an additional 11 percent experienced both NWP and IP. Relatively few children experienced IP only (2 percent). Of children who experienced poverty, NWP was the modal type: 96 percent of children who were poor experienced NWP either alone or in combination with IP. Over time, experiencing only IP decreased, but experiences of only NWP as well as NWP in combination with IP increased. Notably, even though the incidence of only IP decreased between 2001 and 2019, the share of children who experienced any poverty rose, from 34 percent in 2001 to 42 percent in 2019. The growing fraction of children who experienced NWP mechanistically accounts for this increase in poverty.

NWP and Child Outcomes

The first set of models regresses the dichotomous indicators of NWP and IP status on the child outcomes. The models adjust for child and parent characteristics, as described earlier. Table 1 presents the estimates for NWP and IP; covariates for the NWP model are presented in Table A2, and covariates for the IP model are presented in Table A3. The results for these covariates are as expected: achievement scores were lower for Black and Hispanic children compared with White children, for children of lower educated parents compared with children of higher educated parents, and for children residing in households with an unmarried or divorced parent. Relative to boys, girls had higher reading scores and lower math and externalizing behavior scores.

Our results show that NWP is associated with detrimental effects for child development. That is, we found that NWP was negatively correlated with reading and applied problem scores and positively correlated with internalizing and externalizing behavioral problems (Table 1). Effect sizes are small, ranging from 7 percent of a standard deviation for reading to 10 percent of a standard deviation for internalizing behaviors ($p < .01$ for all). These effects are similar in magnitude to those observed for IP, which was also associated with significantly worse scores on all outcomes except for externalizing behaviors. Wald tests indicate that the associations between NWP and the outcomes are statistically indistinguishable from those between IP and the outcomes.

These models are limited, though, in that the reference poverty category contains children who avoid poverty (e.g., are neither net worth nor income poor) as well as children experiencing the other kind of poverty (e.g., children experiencing IP are coded zero in terms of NWP). To properly account for poverty status, we next test the associations between joint poverty status and the child achievement and behavioral problems outcomes. We present results as predicted values, with covariates held at their means. We present
results for the cognitive measures in Figure 2 and the behavioral outcomes in Figure 3, with bars indicating 95 percent confidence intervals. Coefficients for the underlying models are shown in Table 2.

For cognitive outcomes, relative to children who were neither income nor wealth poor, children who experienced NWP had statistically significantly lower reading and applied problem scores: a difference of approximately 5 percentile points, or one third of a standard deviation. The difference between IP and not poor (neither NWP nor IP) was slightly larger, at 9 percentile points for both outcomes. NWP estimates for applied problem scores were statistically equivalent to IP estimates, but those for reading scores were statistically smaller than the IP estimates. The children who appear to have been at the greatest disadvantage are those who experienced both NWP and IP. These children had the lowest reading and applied problem scores, scoring roughly 10 percentile points (or two thirds of a standard deviation) lower than children who experienced neither type of poverty. Notably, for both cognitive outcomes, scores for children who were both net worth and income poor had statistically significantly lower scores than children experiencing NWP alone. Children experiencing both NWP and IP also scored statistically lower on applied problems than children experiencing only NWP (although reading scores do not differ at conventional levels of statistical significance).

For behavioral problems, children experiencing NWP had significantly higher externalizing behavior scores relative to children who were not poor. Effect sizes were small, at approximately 11 percent of a standard deviation. NWP was also associated with a 5 percent decline in internalizing behavior scores, but this estimate was not statistically significant at conventional levels. The NWP estimates were slightly smaller in magnitude, but these estimates did statistically differ from the IP estimates.

Consistent with results for the cognitive outcomes, children who were both net worth poor and income poor had the statistically highest levels of behavioral problems: they scored approximately 18 percent and 12 percent of a standard deviation higher on externalizing and internalizing behavioral problems, respectively, relative to children experiencing neither NWP nor IP. Although indicating larger gaps vis-à-vis children who were neither income nor wealth poor, these estimates for those experiencing both NWP and IP do not differ at statistically conventional levels from estimates for IP only.

**NWP by Presence of Assets and Debts**

Our final set of results investigate whether the association between NWP and our child outcome measures varied by whether wealth deprivation reflected the absence of assets (asset poor NWP) or sufficient levels of assets but high debts (debt-poor NWP). For these analyses, households were divided into three mutually exclusive categories: asset-poor NWP, debt-poor NWP, and no NWP. Among households experiencing NWP, asset poverty was more common than debt poverty, as 85 percent of households in NWP were asset poor but not debt poor (results not shown but available upon request). Likewise, the majority of families who experienced both IP and NWP were asset poor but not debt poor.
We describe patterns of home and asset and debt ownership (Table 3) and then present regression results (Table 4). For asset and debt ownership, we describe the share of households having any assets or debt and then present results for three common types of assets (home equity, checking and savings accounts, retirement accounts) and debt (credit card, medical, and student). Patterns of debt and asset ownership are presented only for 2019, as detailed information about type of debt was not collected prior to 2011 (results for 2013 were similar to those for 2019).

Patterns of asset and debt ownership suggest that asset-poor versus debt-poor NWP households represent qualitatively different economic experiences (Table 2). Asset-poor NWP households, as we would expect, owned very few assets (only 50 percent report owning any assets), and the median conditional value of assets was very low ($1,000). Homeownership was rare among asset-poor households (8 percent), as was owning a retirement account (6 percent). Fewer than half reported a checking or savings account. However, asset-poor households mostly avoided debt: three fifths reported no debt, and among those that did, median debt level ($10,000) was lower than the same estimates for households that are not net worth poor ($16,000). In contrast, 100 percent of debt-poor NWP households reported owning at least one asset, with median values of assets being 20 times higher than those of the asset-poor group. Debt-poor households, relative to asset-poor households, were more likely to own homes, checking and savings accounts, and retirement accounts and, conditional on owning assets, had more money in the assets.

However, the debt-poor group was burdened by very high levels and amounts of debt. Relative to either the asset-poor or not net worth poor group, the debt-poor group was more likely to have debts and owe more money on those debts. Relative to the asset poor, they were 3 times as likely to owe on a credit card, 2.5 times as likely to have medical debt, and 4 times more likely to have a student loan. Median amounts of debt were 6 times higher ($60,000 vs. $10,000) in the debt-poor group relative to the asset-poor group. The debt-poor group was particularly burdened by student loans; 83 percent reported having a student loan, with a median loan amount of $50,000.

Regression results (Table 3) indicate that associations between NWP and child outcomes varied by the type of NWP experienced. Asset poverty had qualitatively negative associations with measures of both academic and behavioral well-being, whereas debt poverty was negatively associated only with problem behaviors. Both asset poverty and debt poverty were associated with increases in internalizing and externalizing behaviors, with statistically equivalent effects between the two models. In contrast, although asset poverty was negatively correlated with reading and applied problem scores, debt poverty was positively correlated (though not at conventional levels of statistical significance). Moreover, as indicated by Wald tests, estimates for reading and applied problem scores differed significantly from each other ($p < .05$). Thus, it appears that the negative association of NWP on cognitive outcomes is mechanically driven by experiences of asset poverty rather than debt poverty.
Robustness Checks

We conducted several robustness checks (results not shown but available upon request). First, we redefined NWP using only liquid or (separately) nonliquid assets. Liquid components of wealth are those aspects that can be quickly converted into cash or cash equivalent and include the value of checking and savings accounts, stocks, mutual funds, bonds, private annuities, individual retirement accounts, and the current value of retirement assets. Nonliquid assets include the value of equity in the primary residence, equity in other real estate, and business assets (including farms). We derived binary indicators of liquid and nonliquid wealth poverty using the same thresholds as those used in the main analysis and reestimated the specification used in the main analysis. We then ran all models substituting liquid and then nonliquid asset poverty for NWP. The results were consistent with the models presented earlier: when we defined NWP as either liquid or nonliquid asset worth poverty, estimates were negatively associated with each of our cognitive and behavioral measures. For cognitive outcomes, liquid wealth poverty was associated with 14 percent of a standard deviation reduction in applied problem scores and 13 percent of a standard deviation reduction in reading scores. Nonliquid wealth poverty was associated with 12 percent of a standard deviation reduction in applied problem scores and 9 percent of a standard deviation reduction in reading scores. For liquid wealth poverty, the coefficient for applied problem scores (−1.64 points) was statistically larger than the corresponding coefficient for NWP (−2.41 points). Overall, however, these models indicated that results were not sensitive to using different assets to define NWP.

To address concerns that the effects of NWP might reflect (the absence of) home equity, we defined NWP relative to liquid wealth poverty (i.e., poverty defined entirely by liquid assets) plus home equity poverty (i.e., poverty defined entirely by the value of home equity, with those not owning a home coded as 1 on this measure). This measure of poverty separates total assets into two of its primary components: financial assets plus the value of home equity. Modeling liquid assets separately from home equity value is important for three reasons. First, home equity constitutes a relatively high portion of total assets for those in the bottom half of the wealth distribution (Gibson-Davis and Percheski 2018). Second, if less wealthy households have real (tangible) assets, they are likely to own the primary residence rather than other real estate or business assets (Bhutta et al. 2019). Third, home equity can be turned to cash, but it is less liquid than assets held in financial instruments (especially checking and savings accounts). We then substituted these measures of liquid wealth poverty and home equity poverty for our measure of NWP (models that also included measures of IP). We found that these measures were qualitatively similar to the coefficient for NWP generated in the main model. These findings suggest that the absence of both financial assets and home equity is associated with lower cognitive and behavioral outcomes.

Finally, we examined the sensitivity of the threshold that defines the NWP measure by considering 50 percent and 200 percent federal poverty thresholds. For reference, the NWP threshold used here, based on 2019 thresholds, for a family of four with two children was $6,482. This figure implies that 50 percent of the NWP threshold would be $3,241, and 200 percent would be $12,964. We found that 50 percent NWP and 200 percent NWP thresholds, respectively, were associated with unfavorable math and
reading achievement scores and behavioral problem scores. Net worth at 50 percent or below the NWP threshold was associated with a 10 percent standard deviation reduction in applied problem scores, an 8 percent standard deviation reduction in reading scores, a 9 percent standard deviation increase in internalizing behaviors, and an 8 percent standard deviation increase in externalizing behaviors. Net worth at 200 percent or below the NWP threshold was associated with a 10 percent standard deviation reduction in applied problem scores, a 7 percent standard deviation reduction in reading scores, a 10 percent standard deviation increase in internalizing behaviors, and a 9 percent standard deviation reduction in externalizing behaviors. These associations do not statistically differ from the associations of the NWP threshold used in the main model, suggesting that the findings are not statistically sensitive to the NWP threshold examined (whether 50 percent, 100 percent, or 200 percent).

**Discussion**

In this study, we examined the relationship between NWP (a potentially critical yet understudied form of economic resource deprivation), IP, and child development. Four core findings emerged from this work. First, consistent with our hypotheses, we found that NWP was associated with unfavorable cognitive and behavioral outcomes for children and youth ages 3 to 17 years. Compared with children not in NWP or IP, children who are in NWP had consistently worse outcomes. Effect sizes were larger for cognitive outcomes (about one third of a standard deviation) than for behavioral measures (one tenth), consistent with evidence from the IP literature regarding the relative predictive power of economic deprivation on cognitive and behavioral measures (National Academies of Sciences, Engineering, and Medicine 2019). Second, we found that the adverse associations between NWP and children’s cognitive and socioemotional outcomes were comparable with the adverse associations between IP and the same outcomes. In some models, deficits associated with IP were larger than deficits associated with NWP, but most did not differ at conventional levels of statistical significance.

Third, children who experienced both NWP and IP exhibited the worst outcomes. Specifically, we found that compared with children who were not in poverty, children who experienced both NWP and IP scored two thirds of a standard deviation lower on the cognitive measures, one quarter of a standard deviation higher on externalizing behavioral problem scores, and nearly one fifth of a standard deviation higher on internalizing behavioral problem scores. Fourth and finally, our comparison of the absence of assets versus the presence of debts suggest that asset NWP may be more consequential. Debt poverty did not appear to put children at risk for lower cognitive performance; that is, children who experienced debt poverty had similar scores on reading and math as did children who were not net worth poor. In contrast, asset poverty was negatively associated with both cognitive and behavioral outcomes.

Our findings highlight the unique adverse effects of wealth deprivation on children’s development and suggest that NWP poses risks for children beyond that of IP. The unfavorable associations of NWP with children’s cognitive and socioemotional outcomes are consistent with previously documented negative associations of wealth levels with child cognitive and behavioral well-being (Diemer et al. 2020; Miller et al. 2021) and with
evidence that income resource deprivation (measured as IP) has negative consequences for children (Magnuson and Votruba-Drzal 2009). Given that more children are considered to have experienced economic deprivation when the definition of poverty includes wealth (Gibson-Davis et al. 2021), our findings suggest that the long-term implications of resource deprivation in childhood may be more pervasive than previous research has shown. Additionally, our results are consistent with previous work showing that income and wealth are theoretical and empirical complements in terms of the ways in which economic resources affect child well-being (Grinstein-Weiss et al. 2014; Pfeffer 2018).

The poor outcomes found for children who were both IP and NWP highlights the risks faced by a heretofore overlooked group of children. Among the children in our sample, 8 percent to 12 percent (depending on the year) were living in households with both insufficient net worth and insufficient income. These doubly poor children had the most unfavorable cognitive and behavioral scores across all measures. Additionally, we found that experiencing both forms of poverty was consistently more detrimental for children than experiencing only one type of poverty. These findings provide evidence that children in households with neither an adequate stock nor flow of resources are at heightened risk for compromised well-being.

Although we cannot directly analyze why debt poverty was more consequential than debt poverty, we suggest that one possible mechanism is differences in parental investments. Asset-poor households have extremely low levels of assets (see Table 2) and may not be able to provide even a minimal level of resources. Economic resources speak more to cognitive, rather than behavioral, well-being (Brooks-Gunn and Duncan 1997), and debt-poor households have substantially higher levels of assets than asset-poor households. Identifying the mechanisms that account for this finding is beyond the scope of study, but this may be a fruitful area for future research.

In addition to these substantive contributions, our study demonstrated the utility of a standardized measure of NWP. Unlike measures of the wealth deprivation that use quartiles or quintiles defined relative to a particular data set (and to the underlying wealth distribution captured by the data set), this measure, based on Census Bureau poverty thresholds, could be used across data sets and populations. We hope that social science and policy scholars will use this measure to revisit the associations between wealth and child well-being and begin to develop a deep knowledge base (like that for IP) as to how wealth scarcity affects child well-being.

Our study has limitations. First, we cannot make causal claims about the estimated relationships between NWP and children’s development and could not address all possible omitted variable bias. Although the Great Recession (2007–2009) may have served as a possible source of exogenous negative shock to wealth, the PSID-CDS switched sampling frames between 2007 and 2014, such that no child who was observed in 2007 was also observed in 2014. Second, we could not investigate the earliest years of children’s development, from birth to age 3, which are proposed to be the most malleable and sensitive to economic circumstances (Shonkoff and Phillips 2000). The sampling frame of the CDS also means that we could not observe many children over multiple years. Third,
Gibson-Davis et al. (2021) suggested that the patterns we report might vary by race and ethnicity beyond the crude indicators we currently include as control variables. A complete exploration of racial variation and the context of racism is beyond the scope of this study, though we aim to pursue this in future research. Finally, we used the pretax configuration of income that the PSID provides, which is close to what is used by the Census Bureau to calculate official poverty rates. This configuration excludes posttax, in-kind transfers (such as the Supplemental Nutrition Assistance Program) and thus represents a narrow (although conventional) measure of poverty. However, one complexity in using broader poverty thresholds for assessing NWP is that most means-tested government programs have eligibility criteria related to household assets. Thus, using a different poverty criterion—such as the supplemental poverty measure, which includes the value of noncash transfers—would confound NWP rates with program participation.

In conclusion, our study shows that children experiencing NWP largely do not overlap with those experiencing IP (see also Gibson-Davis et al. 2020), and this has implications for public policy. Policies focused on income or cash flow may overlook a large fraction of economically vulnerable children. Indeed, asset tests that limit eligibility for programs such as the Supplemental Nutrition Assistance Program (Ratcliffe et al. 2016) may exacerbate NWP. Insofar as NWP is strongly associated with unfavorable outcomes for children, and these associations are independent of those between IP and children’s outcomes, a more comprehensive approach to alleviating economic resource deprivation may be warranted.

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Lisa A. Gennetian, an economist, is the Pritzker Professor of Early Learning Policy Studies and Professor of Public Policy at Duke University. Her research focuses on child poverty, the
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Warren Lowell is a PhD candidate in the joint-degree program in sociology and public policy at Duke University. He studies how housing insecurity, homelessness, and gentrification are related to broader systems of inequality in the United States.

**Appendix**

**Table A1.**

|                          | All Years | 2001 | 2007 | 2013 | 2019 |
|--------------------------|-----------|------|------|------|------|
| Poverty                  |           |      |      |      |      |
| Wealth                   | 35.1      | 29.7 | 28.6 | 41.9 | 40.2 |
| Income                   | 13.8      | 12.4 | 12.8 | 16.5 | 13.1 |
| Outcomes                 |           |      |      |      |      |
| Cognition                |           |      |      |      |      |
| Applied problem          | 105.3 (17.0) | 104.7 (17.3) | 106.4 (15.7) | 105.3 (18.2) | — |
| Reading                  | 104.6 (16.8) | 105.9 (17.6) | 102.0 (16.0) | 105.1 (15.2) | — |
| Behavioral problem       |           |      |      |      |      |
| Externalizing            | 5.07 (4.13) | 5.65 (4.15) | 5.05 (4.14) | 4.91 (4.21) | 4.34 (3.82) |
| Internalizing            | 2.90 (3.14) | 3.30 (3.22) | 2.95 (3.25) | 2.65 (3.05) | 2.53 (2.97) |
| Child characteristics    |           |      |      |      |      |
| Age                      |           |      |      |      |      |
| 3–6 years                | 21.5      | 21.5 | 0    | 31.6 | 26.7 |
| 7–12 years               | 43.3      | 47.2 | 37.2 | 46.3 | 38.3 |
| 13–17 years              | 35.2      | 31.3 | 62.8 | 22.1 | 35.0 |
| Firstborn                | 44.4      | 45.0 | 43.5 | 45.0 | 43.3 |
| Female                   | 48.9      | 50.2 | 48.4 | 48.0 | 48.6 |
| Parent characteristics   |           |      |      |      |      |
| Race/ethnicity           |           |      |      |      |      |
| White                    | 59.4      | 63.6 | 62.9 | 58.9 | 49.8 |
| Black                    | 15.5      | 15.0 | 15.0 | 16.0 | 16.0 |
| Hispanic                 | 18.4      | 14.0 | 15.4 | 20.3 | 25.9 |
| Other race/ethnicity     | 5.7       | 5.2  | 6.3  | 4.3  | 8.1  |
| Education                |           |      |      |      |      |
| No high school diploma   | 18.5      | 18.5 | 19.9 | 17.4 | 18.6 |
| High school diploma      | 26.6      | 27.9 | 27.8 | 25.3 | 25.4 |
| Some college             | 23.3      | 22.9 | 22.2 | 26.0 | 21.3 |
| Bachelor’s degree or more| 28.4      | 25.1 | 25.3 | 30.4 | 33.8 |

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|                   | All Years | 2001   | 2007   | 2013   | 2019   |
|-------------------|----------|--------|--------|--------|--------|
| Married           | 74.4     | 76.3   | 73.5   | 75.2   | 71.0   |
| Unmarried         | 9.0      | 7.9    | 7.8    | 9.7    | 10.7   |
| Divorced/separated| 15.2     | 14.1   | 17.5   | 14.0   | 16.8   |
| Widowed           | 1.4      | 1.7    | 1.3    | 1.0    | 1.6    |
| Age               | 41.1 (8.7)| 40.4 (8.2)| 43.9 (7.7)| 39.9 (9.1)| 41.4 (9.1)|
| Sample size       | 10,522   | 2,889  | 1,611  | 3,045  | 2,977  |

Note: Standard deviations are shown in parentheses.

a. Cognitive scores were not available for 2019.

b. No 3- to 6-year-olds were sampled in 2007.

Table A2.

Regressions of NWP on Cognitive and Behavioral Problem Scores.

|                  | Cognitive | Problem Behavior |
|------------------|-----------|------------------|
|                  | Reading   | Applied Problems | Internalizing | Externalizing |
| NWP              | −1.244*** (.47) | −1.640*** (.47) | .296*** (.08) | .363*** (.10) |
| Child age (3–6 years omitted) |           |                 |               |               |
| 12–17 years      | −.985 (1.38) | 1.314 (1.62)    | .388 (.27)    | 1.062*** (.35) |
| 13–17 years      | −9.971*** (.78) | −3.754*** (.81) | .531*** (.10) | −4.460*** (.14) |
| Child is firstborn| 2.285*** (.48) | .718 (.47)      | .117 (.07)    | −.185** (.09) |
| Child is female  | 3.242*** (.47) | −1.079* (.45)   | .065 (.06)    | −.523*** (.09) |
| Parental race/ethnicity (White omitted) |           |                 |               |               |
| Black            | −7.128*** (.61) | −10.35*** (.61) | −.811*** (.09) | −7.24*** (.12) |
| Hispanic         | −4.881*** (.82) | −6.375*** (.85) | −.208 (.14)   | −.873*** (.18) |
| Other race/ethnicity | −.737 (1.37) | −1.353 (1.47)  | .057 (.20)    | −.190 (.25)    |
| Parental education (no high school diploma omitted) |           |                 |               |               |
| High school diploma | 3.436*** (.66) | 2.736*** (.65) | −.255 (.12)   | −.063 (.15)    |
| Some college     | 6.955*** (.72) | 4.733*** (.72) | −.466*** (.12) | −.313*** (.15) |
| Bachelor’s degree or more | 11.24*** (.80) | 10.20*** (.83) | −.617*** (.13) | −.800*** (.17) |
| Parental marital status (married omitted) |           |                 |               |               |
| Unmarried        | −3.306*** (.73) | −1.508* (.74)   | .312*** (.12) | .523** (.16) |
| Divorced/separated| −2.070*** (.59) | −1.516* (.59)   | .328*** (.10) | .588*** (.12) |
| Widowed          | −.985 (1.38) | 1.314 (1.62)    | .388 (.27)    | 1.062*** (.35) |
| Parent age       | −.200 (.15) | .138 (.17)      | −.070** (.03) | −.104*** (.04) |
| Age squared      | .003 (.00) | −.002 (.00)     | .001*** (.00) | .001*** (.00) |
| Sample size      | 5,140     | 5,388           | 10,445         | 10,271         |

Note: Clustered standard errors are shown in parentheses. NWP = net worth poverty.

* p < .05.
** p < .01.
*** p < .001.
### Table A3.

Regressions of IP on Cognitive and Behavioral Problem Scores.

|                          | Cognitive         | Problem Behavior |
|--------------------------|-------------------|------------------|
|                          | Reading           | Applied Problems | Internalizing  | Externalizing |
| IP                       | −2.200*** (.57)   | −1.789** (.57)   | .269*** (.10) | .155 (.13)    |
| Child age (3–6 years omitted) |                   |                  |                |               |
| 12–17 years              | −6.608*** (.56)   | 1.233* (.61)    | .622*** (.07) | −.023 (.10)   |
| 13–17 years              | −9.986*** (.77)   | −3.748*** (.81) | .537*** (.10) | −.457*** (.14)|
| Child is firstborn       | 2.219*** (.49)    | .675 (.47)      | .119 (.07)    | −.190* (.09)  |
| Child is female          | 3.296*** (.47)    | −1.031 (.45)    | .062 (.06)    | −.523*** (.09)|
| Parental race/ethnicity (White omitted) |                |                  |                |               |
| Black                    | −7.169*** (.61)   | −10.49*** (.60) | −.772*** (.09) | −.664*** (.12) |
| Hispanic                 | −4.865*** (.82)   | −6.406*** (.84) | −.187 (.14)   | −.843*** (.18)|
| Other race/ethnicity     | −.796 (1.38)      | −1.435 (1.48)   | .069 (.21)    | −.174 (2.5)   |
| Parental education (no high school diploma omitted) | |                  |                |               |
| High school diploma      | 3.252*** (.67)    | 2.662*** (.64)  | −.245* (.12)  | −.077 (.15)   |
| Some college             | 6.626*** (.72)    | 4.599*** (.71)  | −.453*** (.12) | −.340* (.16)  |
| Bachelor’s degree or more| 11.02*** (.80)    | 10.17*** (.83)  | −.622*** (.13) | −.848*** (.17)|
| Parental marital status (married omitted) | |                  |                |               |
| Unmarried                | −2.928*** (.74)   | −1.347 (.74)    | .295* (.12)   | .558*** (.16) |
| Divorced/separated       | −1.894*** (.59)   | −1.517* (.60)   | .336*** (.10) | .629*** (.12) |
| Widowed                  | −.928 (1.41)      | 1.297 (1.62)    | .404 (.27)    | 1.108***(.35) |
| Parent age               | −.200 (.15)       | .158 (.17)      | −.074** (.03) | −.113** (.04) |
| Age squared              | .003 (.00)        | −.002 (.00)     | .001** (.00)  | .001** (.00)  |
| Sample size              | 5.140             | 5.388           | 10.445        | 10.271        |

Note: Clustered standard errors are shown in parentheses. IP = income poverty.

* \( p < .05 \)

** \( p < .01 \)

*** \( p < .001 \)

### Table A4.

Regressions of Poverty Status on Cognitive and Behavior Scores Using Balanced Panel.

|                          | Cognitive         | Problem Behavior |
|--------------------------|-------------------|------------------|
|                          | Reading           | Applied Problems | Internalizing  | Externalizing |
| IP only                  | −2.429 (1.14)     | −2.497 (1.09)    | .580* (.24)    | .558 (.31)    |
| NWP only                 | −1.201* (.58)     | −2.068** (.64)   | .190 (.11)     | .317* (.14)   |
| NWP and IP               | −2.117* (.91)     | −2.243* (.95)    | .360* (.16)    | .336 (.21)    |
| Child age (3–6 years omitted) |                |                  |                |               |
| 12–17 years              | −5.531*** (.88)   | 2.663*** (.93)   | .480*** (.12)  | .220 (.16)    |
| 13–17 years              | −8.870*** (1.52)  | −2.034 (1.53)    | .507* (.21)    | .0532 (.28)   |
|                          | Cognitive          | Problem Behavior     |
|--------------------------|--------------------|----------------------|
|                          | Reading            | Applied Problems     | Internalizing | Externalizing |
| Child is firstborn       | 1.114 (.77)        | .200 (.69)           | .127 (.10)    | −.320 (.*14)  |
| Child is female          | 3.153 *** (.74)    | −.644 (.71)          | −.00000226 (.10) | −.485 *** (.14) |
| Parental race/ethnicity  |                    |                      |               |               |
| Black                    | −7.478 *** (.89)   | −10.84 *** (.92)     | −.946 *** (.13) | −.680 *** (.18) |
| Hispanic                 | −5.252 *** (1.31)  | −5.002 *** (1.23)    | −.135 (.21)   | −.599 * (.27)  |
| Other race/ethnicity     | −1.882 (1.55)      | −3.997 * (1.58)      | .122 (.30)    | .0885 (.35)    |
| Parental education       |                    |                      |               |               |
| High school diploma      | 2.303 * (.95)      | 2.260 * (.97)        | −.0985 (.17)  | −.0580 (.22)   |
| Some college             | 3.602 *** (1.02)   | 2.745 ** (1.04)      | −.333 * (.16) | −.185 (.22)    |
| Bachelor’s degree or more| 7.341 *** (1.12)   | 8.085 *** (1.24)     | −.487 ** (.18) | −.778 ** (.24) |
| Parental marital status  |                    |                      |               |               |
| Unmarried                | −3.377 ** (1.04)   | −.897 (1.10)         | .491 ** (.17) | .559 ** (.22)  |
| Divorced/separated       | −.703 (.75)        | −.174 (.80)          | .208 (.13)    | .366 * (.16)   |
| Widowed                  | −.140 (1.71)       | 1.490 (1.76)         | .770 * (.36)  | 1.284 ** (.44) |
| Parent age               |                    |                      |               |               |
| Age                      | −.0688 (.19)       | .167 (.21)           | −.0837 * (.04) | −.154 ** (.05) |
| Age squared              | .00140 (.00)       | −.00170 (.00)        | .000926 * (.00) | .00152 ** (.00) |
| Sample size              | 2,490              | 2,622                | 5,372         | 5,168          |

Note: Clustered standard errors are shown in parentheses. IP = income poverty; NWP = net worth poverty.

* p < .05.
** p < .01.
*** p < .001.

References

Addo Fenaba R. 2014. “Debt, Cohabitation, and Marriage in Young Adulthood.” Demography 51(5):1677–1701. [PubMed: 25267281]

Addo Fenaba R., Houle Jason N., and Simon Daniel. 2016. “Young, Black, and (Still) in the Red: Parental Wealth, Race, and Student Loan Debt.” Race and Social Problems 8(1):64–76. [PubMed: 30026879]

Barr Michael S. 2012. No Slack: The Financial Lives of Low-Income Americans. Washington, DC: Brookings Institution Press.

Berger Lawrence M., and Houle Jason N. 2016. “Parental Debt and Children’s Socioemotional Well-Being.” Pediatrics 137(2):e20153059. [PubMed: 26798042]

Berger Lawrence M., and Houle Jason N. 2019. “Rising Household Debt and Children’s Socioemotional Well-Being Trajectories.” Demography 56(4):1273–1301. [PubMed: 31292913]

Bhutta Neil, Bricker Jesse, Chang Andrew C., Detting Lisa J., Goodman Sarena, Hsu Joanne W., and Moore Kevin B., et al. 2019. “Changes in U.S. Family Finances from 2016 to 2019: Evidence from the Survey of Consumer Finances.” Federal Reserve Bulletin 106(5):1–42.

Blank Rebecca M., and Barr Michael S. 2009. Insufficient Funds: Savings, Assets, Credit, and Banking among Low-Income Households. New York: Russell Sage.

Boen Courtney, Keister Lisa, and Aronson Brian. 2020. “Beyond Net Worth: Racial Differences in Wealth Portfolios and Black–White Health Inequality across the Life Course.” Journal of Health and Social Behavior 61(2):153–69. [PubMed: 32447993]
Boen Courtney, Keister Lisa A., and Graetz Nick. 2021. “Household Wealth and Child Body Mass Index: Patterns and Mechanisms.” RSF: The Russell Sage Foundation Journal of the Social Sciences 7(3):80–100.

Brady David. 2003. “Rethinking the Sociological Measurement of Poverty.” Social Forces 81(3):715–51.

Brandolini Andrea, Magri Silvia, and Smeeding Timothy M.. 2010. “Asset-Based Measurement of Poverty.” Journal of Policy Analysis and Management 29(2):267–84.

Brooks-Gunn Jeanne, and Duncan Greg J.. 1997. “The Effects of Poverty on Children.” The Future of Children 7(2):55–71. [PubMed: 9299837]

Caner Asena, and Wolff Edward N.. 2004. “Asset Poverty in the United States, 1984–99: Evidence from the Panel Study of Income Dynamics.” Review of Income and Wealth 50(4):493–518.

Charroin-Chénier Raphaël. 2018. “Payday Loans and Household Spending: How Access to Payday Lending Shapes the Racial Consumption Gap.” Social Science Research 76:40–54. [PubMed: 30268282]

Conger Rand, Conger Katherine J., and Martin Monica J.. 2010. “Socioeconomic Status, Family Processes, and Individual Development.” Journal of Marriage and Family 72(3):685–704. [PubMed: 20676350]

Conger Rand, and Elder Glen H.. 1994. Families in Troubled Times: Adapting to Change in Rural America. New York: de Gruyter.

Conley Dalton. 1999. Being Black, Living in the Red: Race, Wealth, and Social Policy in America. Berkeley: University of California Press.

Conley Dalton. 2001. “Capital for College: Parental Assets and Postsecondary Schooling.” Sociology of Education 74(1):59–72.

Conwell Jordan A., and Leafia Zi Ye. 2021. “All Wealth Is Not Created Equal: Race, Parental Net Worth, and Children’s Achievement.” RSF: The Russell Sage Foundation Journal of the Social Sciences 7(3):101–21.

Cooper Daniel, Dynan Karen E., and Rhodenhiser Hannah. 2019. “Measuring Household Wealth in the Panel Study of Income Dynamics: The Role of Retirement Assets.” Research Department Working Paper No. 19–6. Boston: Federal Reserve of Boston.

Cutler David M., Lleras-Muney Adriana, and Vogl Tom. 2008. “Socioeconomic Status and Health: Dimensions and Mechanisms.” NBER Working Paper No. 14333. Cambridge, MA: National Bureau of Economic Research.

Deckard Faith M., Goosby Bridget J., and Cheadle Jacob E.. 2021. “Debt Stress, College Stress: Implications for Black and Latinx Students’ Mental Health.” Race and Social Problems. Retrieved July 1, 2022. https://link.springer.com/article/10.1007/s12552-021-09346-z.

Destin Mesmin, and Oyserman Daphna. 2009. “From Assets to School Outcomes: How Finances Shape Children’s Perceived Possibilities and Intentions.” Psychological Science 20(4):414–18. [PubMed: 19298260]

Destin Mesmin, Richman Scott, Varner Fatima, and Mandara Jelani. 2012. “‘Feeling’ Hierarchy: The Pathway from Subjective Social Status to Achievement.” Journal of Adolescence 35(6):1571–79. [PubMed: 22796063]

Diemer Matthew A., Marchand Aixa D., and Mistry Rashmita S.. 2020. “Charting How Wealth Shapes Educational Pathways from Childhood to Early Adulthood: A Developmental Process Model.” Journal of Youth and Adolescence 49:1073–91. [PubMed: 31707579]

Doren Catherine, and Grodsky Eric. 2016. “What Skills Can Buy: Transmission of Advantage through Cognitive and Noncognitive Skills.” Sociology of Education 89(4):321–42. [PubMed: 28337046]

Drentea Patricia. 2000. “Age, Debt and Anxiety.” Journal of Health and Social Behavior 41(4):437–50. [PubMed: 11198567]

Drentea Patricia, and Reynolds John R.. 2015. “Where Does Debt Fit in the Stress Process Model?” Society and Mental Health 5(1):16–32. [PubMed: 31106006]

Duncan Greg J., Kalil Ariel, and Ziol-Guest Kathleen M.. 2017. “Increasing Inequality in Parent Incomes and Children’s Schooling.” Demography 54:1603–26. [PubMed: 28766113]

Duncan Greg J., Magnuson Katherin, Kalil Ariel, and Ziol-Guest Kathleen. 2012. “The Importance of Early Childhood Poverty.” Social Indicators Research 108(1):87–98.
Dunn Lucia. F., and Mirzaie Ida A.. 2016. Consumer Debt Stress, Changes in Household Debt, and the Great Recession. Economic Inquiry 54(1):201–214.

Elliott William III, Destin Mesmin, and Friedline Teri. 2011. “Taking Stock of Ten Years of Research on the Relationship between Assets and Children’s Educational Outcomes: Implications for Theory, Policy and Intervention.” Children and Youth Services Review 33(11):2312–28.

Fang Shu, Huang Jin, Wu Shiyou, Jin Minchao, Kim Youngmi, and Henrichsen Courtney. 2020. “Family Assets, Parental Expectation, and Child Educational Achievement in China: A Validation of Mediation Analyses.” Children and Youth Services Review 112:104875.

Friedline Teri, Masa Rainier D., and Chowa Gina A. N.. 2015. “Transforming Wealth: Using the Inverse Hyperbolic Sine (IHS) and Splines to Predict Youth’s Math Achievement.” Social Science Research 49:264–87. [PubMed: 25432618]

Gennetian Lisa A., and Shafir Eldar. 2015. “The Persistence of Poverty in the Context of Financial Instability: A Behavioral Perspective.” Journal of Policy Analysis and Management 34(4):904–36.

Gibson-Davis Christina, and Hill Heather D.. 2021. “Childhood Wealth Inequality in the United States: Implications for Social Stratification and Well-Being.” RSF: The Russell Sage Foundation Journal of the Social Sciences 7(3):1–26. [PubMed: 34729421]

Gibson-Davis Christina, Keister Lisa, and Gennetian Lisa. 2021. “Net Worth Poverty in Child Households by Race and Ethnicity, 1989–2019.” Journal of Marriage and Family 83(3):667–82 [PubMed: 34887593]

Gibson-Davis Christina M., and Percheski Christine. 2018. “Children and the Elderly: Wealth Inequality among America’s Dependents.” Demography 55(3):1009–32. [PubMed: 29736891]

Grinstein-Weiss Michael, Williams Shanks Trina R., and Beverly Sondra G.. 2014. “Family Assets and Child Outcomes: Evidence and Directions.” The Future of Children 24(1):147–70. [PubMed: 25518707]

Hair Nicole L., Hanson Jamie L., Wolfe Barbara L., and Pollak Seth D.. 2015. “Association of Child Poverty, Brain Development, and Academic Achievement.” JAMA Pediatrics 169(9):822–29. [PubMed: 26192216]

Haveman Robert, and Wolff Edward N.. 2004. “The Concept and Measurement of Asset Poverty: Levels, Trends and Composition for the U.S., 1983–2001.” Journal of Economic Inequality 2(2):145–69.

Haveman Robert, and Wolff Edward N.. 2005. “Who Are the Asset Poor? Levels, Trends, and Composition, 1983–1998.” Pp. 61–86 in Inclusion in the American Dream: Assets, Poverty, and Public Policy, edited by Sherraden M. New York: Oxford University Press.

Jez Su Jin. 2014. “The Differential Impact of Wealth versus Income in the College-Going Process.” Research in Higher Education 55(7):710–34.

Karagiannaki Eleni. 2017. “The Effect of Parental Wealth on Children’s Outcomes in Early Adulthood.” Journal of Economic Inequality 15(3):217–43.

Kennickell Arthur B. 2009. “Ponds and Streams: Wealth and Income in the U.S., 1989 to 2007.” FEDS Working Paper No. 2009–13. New York: Board of Governors of the Federal Reserve System.

Korenman Sanders, Miller Jane E., and Sjaastad John E.. 1995. “Long-Term Poverty and Child Development in the United States: Results from the NLSY.” Children and Youth Services Review 17:127–55.

Lareau Annette. 2003. Unequal Childhoods: Class, Race, and Family Life. Berkeley: University of California Press.

Leventhal Tama, and Dupéré Véronique. 2011. “Moving to Opportunity: Does Long-Term Exposure to ‘Low-Poverty’ Neighborhoods Make a Difference for Adolescents?” Social Science & Medicine 73(5):737–43. [PubMed: 21821323]

Lusardi Annamaria, Schneider Daniel J., and Tufano Peter. 2010. “The Economic Crisis and Medical Care Usage.” NBER Working Paper No. 15843. Cambridge, MA: National Bureau of Economic Research.

Magnuson Katherine, and Votruba-Drzal Elizabeth. 2009. “Enduring Influences of Childhood Poverty.” Pp. 153–79 in Confronting Poverty, Changing Policies, edited by Cancian M and Danziger S. New York: Russell Sage.
McLoyd VC 1990. “The Impact of Economic Hardship on Black Families and Children: Psychological Distress, Parenting, and Socioemotional Development.” Child Development 61(2):311–46. [PubMed: 2188806]

Miller Portia, Podvysotska Tamara, Betancur Laura, and Votruba-Drzal Elizabeth. 2021. “Wealth and Child Development: Differences in Associations by Family Income and Developmental Stage,” RSF: The Russell Sage Foundation Journal of the Social Sciences 7(3):154–74.

Mistry Rashmita S., Brown Christia S., White Elizabeth S., Chow Kirby A., and Gillen-O’Neel Cari. 2015. “Elementary School Children’s Reasoning about Social Class: A Mixed-Methods Study.” Child Development 86(5):1653–71. [PubMed: 26300338]

Moulton Vanessa, Goodman Alissa, Nasim Bilal, Ploubidis George B., and Gambaro Ludovica. 2021. “Parental Wealth and Children’s Cognitive Ability, Mental, and Physical Health: Evidence From the UK Millennium Cohort Study.” Child Development 92(1):115–23. [PubMed: 32939765]

National Academies of Sciences, Engineering, and Medicine. 2019. A Roadmap to Reducing Child Poverty. Washington, DC: National Academies Press.

Nepomnyaschy Lenna, Emory Allison Dwyer, Eickmeyer Kasey J., Waller Maureen R., and Miller Daniel P. 2021. “Parental Debt and Child Well-Being: What Type of Debt Matters for Child Outcomes?” RSF: The Russell Sage Foundation Journal of the Social Sciences 7(3):122–51.

Peterson James L., and Zill Nicholas. 1986. “Marital Disruption, Parent-Child Relationships, and Behavior Problems in Children.” Journal of Marriage and the Family 48(2):295–307.

Pfeffer Fabian T. 2018. “Growing Wealth Gaps in Education.” Demography 55(3):1033–68. [PubMed: 29589320]

Pfeffer Fabian T., and Killewald Alexandra. 2018. “Generations of Advantage. Multigenerational Correlations in Family Wealth.” Social Forces 96(4):1411–42.

Pfeffer Fabian T., and Schoeni Robert F. 2016. “How Wealth Inequality Shapes Our Future.” RSF: The Russell Sage Foundation Journal of the Social Sciences 2(6):2–22. [PubMed: 28824963]

Pfaff Caroline, McKernan Signe-Mary, Wheaton Laura, Kalish Emma, Ruggles Catherine, Armstrong Sara, and Oberlin Christina. 2016. “Asset Limits, SNAP Participation, and Financial Stability.” Washington, DC: Urban Institute.

Ream Robert K., and Gottfried Michael A.. 2019. “Household Wealth and Adolescents’ Social-Emotional Functioning in Schools.” Social Science Research 83:102316. [PubMed: 31422831]

Rose Donald. 1999. “Economic Determinants and Dietary Consequences of Food Insecurity in the United States.” Journal of Nutrition 129(2):517S–20S. [PubMed: 10064321]

Shapiro Thomas M. 2004. The Hidden Cost of Being African American: How Wealth Perpetuates Inequality. New York: Oxford University Press.

Sherraden Michael. 1991. Assets and the Poor. Armonk, NY: M. E. Sharpe.

Shonkoff Jack P., and Phillips Deborah A., eds. 2000. From Neurons to Neighborhoods: The Science of Early Childhood Development. Washington, DC: National Academies Press.

Shuts Kristin, Brey Elizabeth L., Dornbusch Leah A.., Slywotzky Nina, and Olson Kristina R.. 2016. “Children Use Wealth Cues to Evaluate Others.” PLoS ONE 11(3):e0149360. [PubMed: 26933887]

Sousa Ricardo M. 2009. “Wealth Effects on Consumption: Evidence from Euro Area.” Working Paper Series No. 1050. European Central Bank. Retrieved July 1, 2022. https://www.ecb.europa.eu/pub/pdf/scpwps/ecbwp1050.pdf.

U.S. Census Bureau. 2021. “Poverty Thresholds.” Retrieved July 1, 2022. https://www.census.gov/data/tables/time-series/demo/income-poverty/historical-poverty-thresholds.html.

Vera-Toscano Esperanza, Ateca-Amestoy Victoria, and Serrano-Del-Rosal Rafael. 2006. “Building Financial Satisfaction.” Social Indicators Research 77(2):211–43.

Wachs Theodore D., and Evans Gary W.. 2010. “Chaos in Context.” Pp. 3–13 in Chaos and Its Influence on Children’s Development: An Ecological Perspective, edited by Evans GW and Wachs TD. Washington, DC: American Psychological Association.

Wall Thomas P., Vujicic Marko, and Nasseh Kamyar. 2012. “Recent Trends in the Utilization of Dental Care in the United States.” Journal of Dental Education 76(8):1020–27. [PubMed: 22855587]
Shanks Williams, Trina R. 2007. “The Impacts of Household Wealth on Child Development.” Journal of Poverty 11(2):93–116.

Shanks Williams, Trina R, and Mesmin Destin. 2009. “Parental Expectations and Educational Outcomes for Young African American Adults: Do Household Assets Matter?” Race and Social Problems 1(1):27–35.

Woodcock Richard W., and Bonner Johnson Mary E.. 1989. Tests of Achievement, Standard Battery (Form B). Chicago: Riverside.

Yellen Janet L. 2016. “Perspectives on Inequality and Opportunity from the Survey of Consumer Finances.” RSF: The Russell Sage Foundation Journal of the Social Sciences 2(2):44–59. [PubMed: 30123834]

Yeung W. Jean, and Dalton Conley. 2008. “Black–White Achievement Gap and Family Wealth.” Child Development 79(2):303–24. [PubMed: 18366425]

Zhan Min, and Sherraden Michael. 2003. “Assets, Expectations, and Children’s Educational Achievement in Female-Headed Households.” Social Service Review 77(2):191–211.
Figure 1.
Children, by poverty status, by year.

Note. IP = income poverty; NWP = net worth poverty.
Figure 2.
Cognitive scores, by poverty status, predicted values.
Note: Lines represent 95 percent confidence intervals. Models control for child gender; child age; whether the child is firstborn; parental race/ethnicity, marital status, education, and age; and survey wave fixed effects. Reading, $n = 5,140$; applied problems, $n = 5,388$. IP = income poverty; NWP = net worth poverty.
Figure 3.
Behavioral problem scores, by poverty status, predicted values.

*Note:* Lines represent 95 percent confidence intervals. Models control for child gender; child age; whether the child is firstborn; parental race/ethnicity, marital status, education, and age; and survey wave fixed effects. Externalizing behavior, \( n = 10,445 \); internalizing behavior, \( n = 10,271 \). IP = income poverty; NWP = net worth poverty.
### Table 1.

Regressions of Poverty Status on Cognitive and Behavioral Problem Scores.

|                     | Cognitive Outcomes | Problem Behavior |
|---------------------|--------------------|------------------|
|                     | Reading            | Applied Problem  | Internalizing   | Externalizing  |
| Net worth poor      | −1.244 \( ^\ast\ast \) (.47) | −1.640 \( ^\ast\ast\ast\) (.47) | .296 \( ^\ast\ast\ast\) (.08) | .363 \( ^\ast\ast\ast\) (.10) |
| Sample size         | 5,140              | 5,388            | 10,445          | 10,271         |
| Income poor         | −2.200 \( ^\ast\ast\ast\) (.57) | −1.789 \( ^\ast\ast\ast\) (.57) | .269 \( ^\ast\ast\) (.10) | .155 (.13) |
| Sample size         | 5,140              | 5,388            | 10,445          | 10,271         |

Note: Models control for child’s gender and age; whether the child was firstborn; parental race/ethnicity, marital status, education, and age; and survey wave fixed effects. Clustered standard errors are shown in parentheses.

\( ^\ast \) \( p < .01 \).

\( ^\ast\ast \) \( p < .001 \).
Table 2.

Regressions of Poverty Status on Child Well-Being Measures.

|                      | Cognitive |                      | Problem Behavior |                      |
|----------------------|-----------|----------------------|------------------|----------------------|
|                      | Reading   | Applied Problems     | Internalizing    | Externalizing        |
| IP only              | −2.537**  | −2.700** (.96)       | .444*.19         | .322 (.24)           |
| NWP only             | −1.141*   | −1.716*** (.51)      | .309***.08       | .393***.11           |
| NWP and IP           | −2.988*** | −2.842***.72         | .459***.12       | .412* .17            |
| Child age (3–6 years omitted) |          |                      |                  |                      |
| 12–17 years         | −6.595*** | 1.242*.61            | .619***.07       | −.023 (.10)           |
| 13–17 years         | −9.990*** | −3.769***.81         | .535***.10       | −.459***.14           |
| Child is firstborn  | 2.189***  | −.639 (.47)          | .127 (.07)       | −.81* .09             |
| Child is female     | 3.287***  | −1.049*.45           | .0593.06         | −.527***.09           |
| Parental race/ethnicity (White omitted) |          |                      |                  |                      |
| Black               | −7.010*** | −1.026***.60         | −.823***.09      | −.731***.13           |
| Hispanic            | −4.784*** | −6.246***.85         | −.222 (.14)      | −.885***.18           |
| Other race/ethnicity | −.737 (.37) | −1.341 (.47)         | .0494 (.21)      | −.196 (.25)           |
| Parental education (no high school diploma omitted) |          |                      |                  |                      |
| High school diploma | 3.147***  | 2.527***.64          | −.227 (.12)      | −.0525 (.15)          |
| Some college        | 6.477***  | 4.385***.71          | −.422***.12      | −.297 (.16)           |
| Bachelor’s degree or more | 10.78*** | 9.813***.83          | −.567***.13      | −.776***.17           |
| Parental marital status (married omitted) |          |                      |                  |                      |
| Unmarried           | −2.743*** | −1.103 (.75)         | .252*.12         | .501***.16            |
| Divorced/separated  | −1.720*** | −1.258*.60           | .291**.10        | .571***.12            |
| Widowed             | −.776.41  | 1.515 (1.64)         | .361 (.27)       | 1.051***.35           |
| Parent age          | −.233 (.15) | .112 (.17)          | −.0657* (.03)    | −.102**.04            |
| Age squared         | .00297 (.00) | −.00133 (.00)        | .000754*.00      | .00103***.00          |
| Sample size         | 5,140     | 5,388                | 10,445           | 10,271                |
Note: Clustered standard errors are shown in parentheses. IP = income poverty; NWP = net worth poverty.

*  \( p < .05 \)

**  \( p < .01 \)

***  \( p < .001 \)
## Table 3.

### Asset and Debt Portfolios by NWP Subgroups, 2019.

|                          | Asset-Poor NWP |              | Debt-Poor NWP |              | No NWP |              |
|--------------------------|----------------|--------------|----------------|--------------|--------|--------------|
|                          | Owned | Median<sup>a</sup> | Owned | Median | Owned | Median | Owned | Median |
| Home equity              | .08   | $4,000         | .51   | $25,500 | .84   | $92,000 |
| Assets                   | .50   | $1,000         | 1.00  | $20,000 | 1.00  | $144,000 |
| Checking/savings         | .48   | $700           | .90   | $5,000  | .89   | $10,000 |
| Retirement accounts      | .06   | $1,800         | .46   | $10,000 | .45   | $43,500 |
| Debts                    | .42   | $10,000        | 1.00  | $60,100 | .59   | $16,000 |
| Credit card              | .23   | $3,000         | .71   | $6,500  | .42   | $5,600  |
| Medical                  | .09   | $3,000         | .23   | $6,500  | .08   | $3,000  |
| Student                  | .23   | $17,000        | .83   | $50,000 | .24   | $20,000 |
| Sample size              | 1,206 | 231           | 1,540 |        |

Note: NWP = net worth poverty.

<sup>a</sup>Medians are conditional on owning assets or having debt.

<sup>b</sup>For home equity, owned refers to share of households owning a home.
|                   | Cognitive Outcomes | Problem Behavior |       |       |
|-------------------|--------------------|------------------|------|------|
|                   | Reading            | Applied Problem  | Internalizing | Externalizing |
| No NWP            | —                  | —                | —    | —    |
| Asset-poor NWP    | −1.793*** (.51)    | −2.183*** (.51)  | .306*** (.08) | .379*** (.11) |
| Debt-poor NWP     | .710 (.82)         | .369 (.84)       | .262* (.13)  | .312 (.16)    |
| Sample size       | 5,140              | 5,388            | 10,445 | 10,271 |

Note: Models control for child’s gender and age; whether the child was firstborn; parental race/ethnicity, marital status, education, and age; and survey wave fixed effects. Clustered standard errors are shown in parentheses. NWP = net worth poverty.

*** p < .001;
* p < .05.