

Adverse Childhood Experiences and Long-term Economic Well-being: Understanding Mechanisms to Explain Group Differences in Net Worth

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Abstract

Past research has documented that Adverse Childhood Experiences (ACEs) impact cognition, education, relationship stability, employment, and earnings. Less research has focused on how these impacts affect measures of long-term economic well-being that capture cumulative disadvantage. This study therefore uses the National Longitudinal Study of Youth 1979 Cohort to investigate the net worth of individuals near the end of their careers, comparing those with and without ACEs. The study uses a Blinder-Oaxaca Decomposition to investigate the underlying mechanisms for any group differences. The findings suggest that observed differences in education, marital instability, and lifetime earnings explain significant portions of the net worth disparities between those with and without ACEs. The fact that those experiencing ACEs also get less out of normally beneficial aspects of their families – such as higher income – also plays a significant role. The results suggest that no “silver bullet” exists to reduce the impact of ACEs on long-term economic well-being. Interventions that simultaneously prevent child maltreatment and increase social and emotional development – like high-quality preschool – are more likely to be effective than those targeting any single aspect of individuals’ lives.

Keywords: Adverse Childhood Experiences, Wealth Inequality, Cumulative Disadvantage

Introduction

Empirical research over the past three decades has advanced understanding of the long-term effects of childhood trauma on survivors' well-being. In the late 1990s, the seminal Kaiser Permanente Study conceptualized clusters of potentially harmful events across three categories – child neglect, abuse, and household dysfunction – known as adverse childhood experiences (ACEs) (Felitti 2019; Felitti et al., 1998). Based on a cumulative index of 10 items, these scholars found that ACEs were associated with a range of diseases and chronic health conditions (Felitti 1998; Felitti et al. 1998). Since then, a vast body of research has documented links between ACEs and physical health problems and premature mortality (Hughes et al. 2017; Hughes et al. 2021; Kajeepeta et al. 2015; Petruccelli et al. 2019). A parallel body of literature has found that ACEs undermine mental health in adulthood (Merrick et al. 2017), including depression (Chapman et al. 2004) and suicidality (Dube et al. 2001). However, knowledge about the long-term effects of ACEs on other dimensions of survivors' well-being, such as financial health, remains underdeveloped.¹

The current study therefore examines the relationship between ACEs and a key measure of lifetime financial health – net worth. Specifically, the study focuses on household net worth for adults in their mid-50s to early-60s from The National Longitudinal Survey of Youth 1979 Cohort, a national, population-based sample. Unlike point-in-time measures of financial well-being like income or poverty, net worth at this age reflects lifetime earnings and savings, and plays a key role in financial independence at older ages. The study seeks to understand both the extent to which ACEs are associated with lower net worth as well as mechanisms for any differences. To this end, the study conducts a Blinder-Oaxaca Decomposition exploring how family background, cognitive ability and education, relationship stability, and employment/earnings contribute to any difference in net worth.

The results suggest that observed differences in education, relationship stability, and earnings all play sizable roles in reducing net worth among those with ACEs. A smaller but significant contributor is that positive family characteristics – in particular higher family income during adolescence – translate less to adult net worth in the presence of ACEs. In other words,

¹ At a macro level, several studies have examined the economic costs of ACEs, such as reduced gross national product, lost productivity, and increased healthcare costs (Fang et al. 2015; Hughes et al. 2021). Bellis et al. (2019), in a meta-analysis, found that annual healthcare costs attributable to ACEs were estimated to be \$581 billion in the United States and \$748 billion in Europe.

ACEs can undo things that normally give children “a leg up.” The study results indicate that no silver bullet exists for preventing long-run damage from ACEs. Indeed, the academic literature has long suggested the multi-dimensional impact of ACEs.

Literature Review

This section first reviews the literature on the impact of ACEs on long-term financial outcomes. The section then turns to a discussion of the underlying mechanisms for any impact.

ACEs and Long-term Financial Outcomes

An emerging scholarly interest exists in how early life trauma undermines long-term financial health. A small group of studies have utilized derivatives of the original ACE index to examine relationships with point-in-time outcomes in adulthood such as income, poverty, or financial stress. Metzler et al. (2017) relied on a large population-based survey – the Behavioral Risk Factor Surveillance System (BRFSS) – to test the hypothesis that ACEs are correlated with adult socio-economic status among noninstitutionalized adults. Researchers found that those who experienced a high dosage of ACEs (four or more) were 1.6 times more likely to live in poverty. Jones et al. (2018) also used the BRFSS and found a direct relationship between number of ACEs and low-income status among a subsample in their late 50s. Similarly, ACEs were negatively related to income and other SES indicators for adults in their late 40s from five U.S. states (Font & Maguire-Jack 2016).

Scholars have also examined relationships between ACEs and financial outcomes broader than household income. For example, Harter and Harter (2021) found that middle-aged participants from two states in the 2012 BRFSS who had experienced ACEs were more likely to report financial distress, even after controlling for income level. In an earlier study using the Kaiser Permanente dataset, Anda et al. (2004) found that the number of ACEs were negatively related to worker performance for workers averaging in their late 40s. A few studies among specialized populations, such as male violent offenders (Segeren et al. 2020) or young Taiwanese adults (Chen et al. 2023), provide additional evidence along the same lines. These studies have improved our understanding of financial outcomes of ACEs, but they have been limited by cross-sectional design, regional samples, and/or narrow conceptualization of financial outcomes, all issues the current study attempts to overcome.

The article closest in spirit to our own is Schurer et al. (2019). In that study, researchers examined longitudinal data from a large British cohort study of participants from birth to 55 years of age. Results quantified the economic penalty of each additional ACE, including: 9% lower monthly earnings at age 55, 25% higher probability of being welfare dependent, and 27% higher probability of subjective poverty. The study also pointed to the importance of human capital differences like education in explaining these differences. Nonetheless, that study utilized point-in-time dependent variables, an ACE index that did not include physical abuse, and a sample that suffered from significant attrition. The present study advances the literature further, by focusing on a broader set of ACEs and on a dependent variable in lifetime net worth that would reflect not just lower earnings at a point-in-time, but also the cumulative effect of lower lifetime earnings or any relative inability to save those earnings.

Mechanisms Relating ACEs to Financial Outcomes

Beyond examining the relationship between ACEs and net worth, this study examines the role of several mechanisms that may explain how ACEs exert financial penalties on individuals: compromised cognitive functioning and education, relationship instability, and employment/earnings. Next, we review the literature in these three areas.

Cognitive Functioning and Education

A first mechanism through which ACEs may undermine long-term financial health is lower cognitive functioning and educational attainment. Early studies documented that childhood trauma (i.e., child abuse and neglect) was directly correlated with lower cognitive functioning in school (Lund et al. 2020) that can last into adulthood (Gould et al. 2012). Regarding educational attainment, Otero et al.'s (2021) study of U.S. adolescents and young adults found that each additional ACE was responsible for a 29% decrease in the likelihood of college degree completion. In another study (Font & Maguire-Jack 2016), any ACE increased participants' chances of dropping out of high school and reduced chances of earning a college degree. A few studies have evaluated the effects of high dosage of ACEs on educational outcomes. Metzler et al. (2017) and Hardcastle et al. (2018) found that high dosage ACE histories reduced participants' odds of earning their high school degree.

Relationship Instability

A second possible mechanism is relationship instability. Early research on the effects of child maltreatment established that a history of child abuse and neglect is associated with poor interpersonal skills in adulthood, including low levels of self-esteem and trust, higher rates of aggressive behaviors, and lower levels of social support (Tuscic et al. 2013). Survivors of child abuse and neglect also experience higher rates of divorce and separation in adulthood (Covey et al. 2013; Currie & Widom 2010) and are more likely to never marry (Covey et al. 2013).

More recent research has broadened the lens of child adversities beyond maltreatment. In a large population-based sample across five states, middle-aged adults with a history of ACEs are more likely to be divorced or separated, compared to counterparts with no history of ACEs (Font & Maguire-Jack 2016). Anda et al. (2004) established that ACEs are linked to an array of relational problems, including marital instability (i.e., three or more marriages). Additionally, ACEs are associated with higher levels of social isolation (Vederhus et al. 2022), interpersonal violence victimization (Montalvo-Liendo et al. 2015; Thulin et al. 2021), and relational aggression (Godbout et al. 2019; Herrenkohl et al. 2023). This study will carefully consider how differences in marriage and divorce drive any differences in net worth.

Work and Earnings

Of the three proposed mechanisms explaining the influence of ACEs on financial health, employment has been investigated in the largest number of studies. Anda et al. (2004) found that ACE scores were positively related to poor employment outcomes such as absenteeism and other job problems, and that this relationship followed a dose-response pattern, with those experiencing more ACEs suffering worse outcomes.

Several subsequent studies have supported this initial finding. For example, Liu et al. (2013) examined 2009 BRFSS data from a large sample of adults (N = 17,469; age range = 18-64 years) from five states. Results indicated that unemployment rates were higher for those with any history of ACEs, and that these rates increased with each additional ACE. Similarly, Metzler et al. (2017) analyzed data from 10 states within the BRFSS and found that compared to participants who reported no history of ACE, those with three or more ACEs were 2.4 times more likely to have been out of work in the past year. One study based on a small sample of African-American men (N=199; age range= 16 – 63 years) not only confirmed that ACEs were negatively related to current employment, but also explored possible reasons for this relationship,

such as substance use, incarceration, or mental health problems (Topitzes et al. 2016). The negative relationship between ACEs and employment exists in samples outside of the U.S. as well, including in Taiwan (Chen et al. 2023), the Netherlands (Hansen et al. 2021), and the U.K. (Smith et al. 2022). The next section turns to the data and methodology used to determine how these mechanisms relate to differences in net worth between those with and without ACEs.

Data and Methodology

This section describes the data used in the analysis and then turns to the methodology used to identify mechanisms that may link ACEs to late career net worth.

Data

This paper uses the 1979 to 2018 survey years of the *National Longitudinal Survey of Youth 1979 Cohort* (NLSY79). The NLSY79 began as a sample of 12,686 individuals born between 1957 and 1964. These individuals were aged 14 to 22 at the time of the first survey, and ages 54 to 61 in the last wave analyzed in this study. The NLSY79 includes data on five ACEs: 1) physical abuse; 2) emotional neglect; 3) family alcohol abuse; 4) family mental health issues; and 5) parental separation. This section first focuses on how these ACEs are identified in the data, how prevalence rates in the NLSY79 compare to other studies, and how the retrospective nature of collection may affect estimates. The section then turns to the identification of information on respondents' family background, educational attainment, employment/earnings, and lastly their net worth.

Adverse Childhood Experiences

While detail is provided below on the identification of each individual ACE included in the study, it is worth noting that all ACE data in this study is retrospective; the first four listed are based on a 2012 NLSY79 module and the last on data collected mostly in 1988. The retrospective nature of the data necessitates some attention, since individuals may either forget adverse events as they age, exaggerate them to justify poor economic or other life outcomes, or inaccurately report distal events for a variety of reasons (e.g., shame, trauma, family pride, community norms) (Reuben et al. 2016). This attention should not be interpreted as an admission that the data collected by the NLSY79 is inherently invalid or inferior. Indeed, prospective data will also contain inconsistencies based on which of a child's contacts is reached (e.g., parent, teacher), and is inherently subject to underreporting when the contact is the abuser. Instead, this

section tries to offer evidence that the retrospective data contained in the NLSY79 contains useful information that reflects the sample member's experiences and in a way consistent with other sources of data on the topic.

Physical Abuse. Physical abuse was identified based on the question: "Before age 18, how often did a parent or adult in your home ever hit, beat, kick or physically harm you in any way? Do not include spanking. Would you say never, once, or more than once?" An individual is labeled as having experienced physical abuse if their answer was "once" or "more than once." Among respondents (and prior to any other sample restrictions described below), 14.8% experienced physical abuse at least once. Given the sensitive nature of the question, it is noteworthy that non-response was extremely low; only 0.5% refused to answer, didn't know, or were skipped for some other reason.

The incidence of physical abuse in the NLSY79 is in the range dictated by other U.S. and non-U.S. based sources. For example, Zielinski (2009) uses the U.S.-based retrospective National Comorbidity Study and finds that 7% of that sample had been physically abused "often." Fuemmeler et al. (2009) found slightly higher rates – at 14.6% – in the National Longitudinal Survey of Adolescent Health, another U.S.-based study with retrospective questions on physical abuse. Looking just at the state of Wisconsin and using another retrospective study – the Wisconsin Longitudinal Study – Springer et al. (2007) found a slightly lower rate of abuse, at 11.4%. Finally, Rueben et al. (2016) used data on a New Zealand sample and found 15% and 11% of individuals respectively had experienced physical abuse, depending on whether data were collected prospectively or retrospectively.

Emotional Neglect. Emotional neglect was identified based on the question: "Before age 18, how much parental love and affection did you receive growing up? Would you say a great deal, quite a lot, a little, or none at all?" A person was said to be emotionally neglected if they answered "a little" or "none at all." The incidence for this definition of emotional neglect was 17.9%.

This rate fits into the range found by other studies, although that range is quite broad. For example, Cronholm et al. (2015) examined two samples – one from Philadelphia and a broader sample of Kaiser Permanente Insurees – and found rather different estimates of 7.8% and 14.8% respectively, both lower than the NLSY79. On the other hand, a meta-analysis of 16 independent samples by Stoltenborough et al. (2013) reported a rate of emotional neglect slightly higher than the NLSY79 definition, at 18.4%.

Family Alcohol Abuse. Family alcohol abuse was identified simply as a “yes” response to the question: “Before age 18, did you live with anyone who was a problem drinker or alcoholic?” Of those responding, 18.4% of individuals reported living with someone who had an alcohol abuse problem. This incidence is in line with other studies. For example, Dube et al. (2001) analyzed a sample of adult Kaiser participants from a slightly older birth cohort than the NLSY79, and found 22.1% had at least one parent with an alcohol problem.²

Mental Illness in the Household. Mental illness in the household was identified as a “yes” response to the question: “Before age 18, did you live with anyone who was depressed, mentally ill, or suicidal?” Of those responding, 7.1% reported having lived with someone struggling with mental illness. Estimates of family mental illness vary substantially in the literature, with the estimate in the NLSY79 below many, but not all, other estimates. For example, Dube et al. (2001) found that 20.3% of its cohort claimed to have lived with someone struggling with mental illness. Reuben et al. (2016) found rates between 20% and 30% for prospective versus retrospective estimates. And, Cronholm et al. (2015) reported rates of 21.4% and 18.8% in their two samples. Schurer et al. (2019), however, found rates below 4% in prospectively-collected data based in part on the household’s contact with mental health professionals during a child’s teenage years.

Separation from a Parent. The study identifies separation from parents in three ways: 1) the death of a parent; 2) parental divorce; and 3) residence with non-family members. The first way of identifying parental separation – the death of a parent – is based on questions asked in 1988, a time when sample members were roughly ages 23 to 31. The questions focused on the universe of individuals who did not live with their biological/adoptive parents continuously through age 18, and asked them why they had stopped living with them. If the individual answered that it was due to parental death, then they were coded as having experienced this ACE. Of those answering the 1988 questions, 6.3% had experienced a parental death. This incidence rate is roughly in line with contemporaneous estimates. For example, in a book on bereavement published by the U.S. Institute of Medicine and edited by Osterweis, Solomon, and Green (1984) reported that roughly 5% of children will experience death of a parent.

² It is worth noting that more recent cohorts seem to be less likely to have lived with a parent with an alcohol problem. For example, Sacks and Murphy (2018) find in the 2016 National Survey of Children’s Health that roughly 10% of children have a parent with an alcohol problem at some point from birth to age 17. This decrease could be driven by the increase in single motherhood since the NLSY79 cohort – fathers are much more likely to have an alcohol use problem than mothers.

Parental divorce in the NLSY79 is identified from several sources within the survey. The first is the same set of six questions used for parental death on the reason why an individual stopped living with one of their biological or adoptive parents. If the individual stated this was due to separation/divorce, then it was assumed that they had experienced this ACE. In addition to these questions, other questions from the initial NLSY79 interviews were used. Sample members were said to have experienced divorce if they reported having lived with a stepparent for at least four months in the past, or if the “householder” currently was divorced or separated.

The final type of parental separation – residing with non-family – incorporates several living arrangements between birth and age 18 including foster care, orphanages, juvenile detention centers, group care, other institutional settings, friends, or living on one’s own (counted as an ACE only at ages 16 and under). These arrangements are identified from a set of 19 questions asked in 1988 about sample member’s living situation at each age during childhood. For example: “[did the respondent] live in a children’s home/orphanage at birth?” or “[did the respondent] live in a group care home at age 14?” Among respondents, 3.7% had lived with a non-family member at some point in their childhood. This proportion is lower than in the general population – for example the CDC reports that 6% of children will live in foster care alone. This lower proportion likely occurs because youth in the NLSY79 were not institutionalized at the time of sampling, and therefore less likely than the general population to be in these settings at earlier ages. Overall, 31.7% of the NLSY79 sample experienced a parental separation.

Cumulative Occurrence of ACEs. In the sample, 55% of individuals experienced at least one ACE, with 46% experiencing one to two ACEs and 9% experiencing three or more. Since the literature above suggested that dosing may be important, two decomposition analyses will be performed. The first will simply compare those with no ACEs to those with any ACEs. To investigate dosing, the second analysis will compare those with one to two ACEs to those without any ACEs, and then those with three or more ACEs to those without any ACEs.

Other Independent Variables

A central objective of this study is to explore potential mechanisms that might translate ACEs to any difference in net worth. This exploration requires data on family background, cognitive ability and human capital attainment, marital history, and earnings and work histories. Table 1 contains descriptive statistics on the variables below by ACE status.

Family Background. One reason that individuals with ACEs may experience different cumulative outcomes is a less advantaged starting point in life. To capture this possibility, several variables related to family background were included: mother and father's education, whether the individual's parents were ever married, and the household's total family income in 1978.

Because individuals living with single parents or with other family members may not know the education of both parents, separate indicators for not knowing their mother or father's education are included. Table 1 shows that the parents of those without any ACEs are slightly more educated than those with them – half a year for mothers and a full year for fathers – but are similarly likely to have been married. Median family income is substantially higher for those without ACEs versus those with them – \$53,882 versus \$34,096 (in 2018 dollars).

Cognitive Ability and Education. The next avenue through which ACEs could relate to late-life net worth is through their well-documented effect on cognitive ability. During the summer and fall of 1980, NLSY79 respondents participated in an effort by the U.S. Departments of Defense and Military Services that involved them taking the *Armed Services Vocational Aptitude Battery (ASVAB)*. The ASVAB tests academic skills like general science, word knowledge, and basic mathematics and vocational skills, like auto and shop information and mechanical comprehension. Data on each individual's performance is made available as a percentile score normed to the general population. In the NLSY79 sample, those without ACEs have higher percentile scores than those with them – the 41st versus 36th percentiles respectively.

In addition to cognitive ability, ACEs affect the ability to complete formal education through their effect on skills not measured by the ASVAB (e.g., classroom manner, persistence on tasks, etc.). This study measures formal education through indicators for the completion of high school, college attendance without degree completion, or the completion of at least a bachelor's degree. Table 1 illustrates that those that do not experience ACEs are less likely to drop out of high school (7.2 % versus 10.4%) and more likely to graduate with a bachelor's degree (24.5% versus 20.3%) than those with any ACEs.

Relationship Instability. Another mechanism that this study considers is the incidence of marriage and divorce. Marriage facilitates the accumulation of net worth because it allows economic risk sharing (e.g., one partner working more if another loses their job) as well as returns to scale (i.e., it is cheaper per person for two individuals to maintain a single household than two households). Inversely, divorce is damaging to net worth due to legal costs and the

splitting of household net worth. The NLSY79 collects detailed data on marriages that allows the identification of an individual's status as ever married, the length of time that they have spent married, and divorce. Table 1 shows that those without ACEs are only slightly more likely to ever get married than those with them (85.8% versus 82.1%). But, those without ACEs are much less likely to end those marriages in divorce (45.2% versus 57.1%). The end result is that those without ACEs are married during 1.5 more NLSY survey years, and are nearly 10 percentage points more likely to be married in their fifties relative to those with ACEs.

Work and Earnings. The final avenue that could lead those experiencing ACEs to accumulate differential net worth is less employment and/or lower earnings, even conditional on education. This could occur if, for example, ACEs lessen an individual's ability to trust or otherwise work with teammates. Each NLSY79 wave collects data on earnings and employment which are used to construct measures of work experience, annual earnings, and total lifetime earnings. As Figure 1 shows, those with ACEs are less likely to work than those without ACEs at any given age and that, when working, earn less. The analysis uses total observed earnings within the person's lifetime (e.g., a person making \$50,000 for 20 years would have a value of \$1 million attributable to them) to account for this particular mechanism.

Dependent Variable

The dependent variable to be analyzed is net worth – i.e., assets minus liabilities of the individual's household. Assets include money in savings and checking accounts as well as directly held stocks, bonds, and CDs, and the value of retirement accounts such as 401(k)s and IRAs. Assets also include the market value of homes, other real estate, vehicles, and businesses. Debts include money owed on homes, other real estate, vehicles, and businesses, as well as any revolving debt. Figure 2 shows data on net worth for those without ACEs versus those with them, and illustrates the shortfall that accumulates over the lives of those who experience ACEs.

In the NLSY 1979 Cohort, net worth data are collected every four years. The value used in this paper is from either the 2012 or 2016 wave, depending on when the individual was last observed. Due to the presence of positive outliers, the top 2.5% of observations by net worth are trimmed from the sample, with untrimmed results available in online Appendix Table 1. As an illustration of this issue, the 97.5th percentile of net worth is \$1.7 million, but the 99th percentile is over \$4 million higher, at \$5.8 million. The same issue does not exist on the negative end; the 1st percentile is -\$72,000, whereas the 2.5th percentile is -\$10,000.

Methodology

This paper undertakes a Blinder-Oaxaca decomposition, exploring four mechanisms through which ACEs may impact net worth: 1) family background; 2) cognitive functioning/education; 3) relationship stability; and 4) employment/earnings. The approach requires dividing the sample into two groups and analyzing any difference in the dependent variable between those groups. The analysis will be conducted in two ways: 1) comparing those without ACEs versus those with any; and 2) comparing those without any ACEs to those with one to two ACEs and then to those with three or more ACEs. The decomposition then endeavors to divide any difference in the dependent variable between that explained by observed differences in the independent variables and that left unexplained.

To understand the approach, consider a decomposition using groups defined as those without ACEs versus those with any ACEs and for simplicity examining a single variable – total observed lifetime earnings. The goal of the approach is to understand the difference in average net worth between the two groups that could be written as the difference between two regressions:

$$E[NW^{NO}] - E[NW^{YES}] = E[LE^{NO}] * \beta^{NO} - E[LE^{YES}] * \beta^{YES} \quad (1)$$

In equation (1), the superscript “NO” indicates those without ACEs in childhood versus those that did experience them, as indicated by “YES.” The variables considered are net worth, NW, and lifetime earnings, LE. The β represent the slope coefficient on lifetime earnings from a simple regression within the indicated group, where the constant has been suppressed for convenience and the expected values of the errors drop because they are zero by assumption. The right side of equation (1) reflects the fact that in an OLS regression, the regression passes through the mean of the data.

By adding and subtracting several terms, the right side of equation (1) can be rewritten as:

$$[E[LE^{NO}] - E[LE^{YES}]] * \beta^{YES} + [\beta^{NO} - \beta^{YES}] * E[LE^{YES}] + [\beta^{NO} - \beta^{YES}] * [E[LE^{NO}] - E[LE^{YES}]] \quad (2)$$

The first part of the sum represents the portion of the difference in net worth between those without versus with ACEs in childhood associated with potentially lower lifetime earnings among the ACE group. This first quantity is often referred to as the “explained” part of the difference, because it is explained by the difference in an observed variable. The second part of

the sum represents the difference in net worth between those without and with ACEs due to any difference in the relationship between net worth and lifetime earnings. For example, if those with ACEs have more trouble planning for the future, then each dollar earned may equate to lower net worth. This second quantity is often referred to as the “unexplained” portion of the difference, because it is due to a difference in slopes with unclear origins (e.g., it could be an inability to execute a savings plan, or a lack of access to quality banking, etc.). Finally, the third term is the “interaction” effect, and reflects the fact that both the observed variable and its relationship to the dependent variable may differ at the same time.

This third term is necessary because the selection of the reference group in the first two terms is arbitrary. The first term applies the slope of the group with ACEs to the observed difference in earnings, while the second term similarly applies the average earnings of those with ACEs to the difference in slopes. However, these two components would be different had the slope and earnings of those without ACEs been applied instead, and there is no reason to choose one group over the other.

This “threefold” decomposition is implemented using the “oaxaca” STATA routine described in Jann (2008). The procedure produces not only the portion of the difference explained, unexplained, and due to interactions, but also the portion of those components due to each individual variable. In addition, it provides standard errors of these estimates, so that the paper can discuss which variables are significant within each of the components.

Results

This section presents results. First, results are presented for no versus any ACEs. Then, to explore if more ACEs have a different effect and decomposition than fewer ACEs, results are presented for no ACEs versus one to two and then three plus ACEs.

No Versus Any ACEs

The results for having no ACEs versus any ACEs are presented in Table 2 and summarized in Figure 3. The decomposition suggests that of the roughly \$78,000 gap between those with and without ACEs, 68% – or \$52,000 – is explained by differences in observed variables, 26% – or \$21,000 – “unexplained” by differences in coefficients, and the remaining 6% by interaction effects. The portions due to observed variables and coefficients are both

statistically significant at the five-percent level, while the portion due to interactions is not significantly different from zero.

The first column of Table 2 presents the estimated portion of the explained difference due to each of the observed variables. A few points of interest emerge. First, differences in demographics between those with and without ACEs explain only a small portion of the decomposition. Just under \$6,000 of the roughly \$52,000 explained by observed characteristics is due to demographic differences. The fact that those experiencing ACEs are more likely to be Black is the only significant driver of that difference at the five-percent level. Differences in cognitive ability and education explain a slightly larger portion. The lower AFQT scores among those experiencing ACEs explain just under \$5,000 of the difference, while a lower likelihood of achieving bachelor's degrees explains over \$7,000 of the difference (with both significant at the 5-percent level).

Marital patterns explain an even larger portion of the difference due to observed variables. Indeed, three of the four variables associated with marriage explain a significant portion of the difference. More frequent divorce explains over \$4,000 of the difference, and fewer survey years of observed marriage over \$5,000. The largest marriage effect – at over \$7,000 – is due to the simple fact that at the time net worth was measured in the individual's mid-to-late 50s, those experiencing ACEs were less likely to be married. All together, marriage explains over \$16,000 of the net worth gap, or over 20% of the total difference. This effect is similar in size to differences in lifetime earnings, which explain just over \$15,000 of the difference. Taken together, the results suggest that all of the mechanisms considered matter, but not equally. Differences in marriage and earnings play outsized roles.

With respect to the “unexplained” portion due to differences in coefficients, several variables seem to play a large role. However, unlike observed characteristics, where every significant finding worked against the net worth of those with ACEs, a few of the coefficient-based differences contribute to higher net worth. Of those working significantly against those with ACEs, one of the more notable findings is that total family income in 1979 contributes a positive \$24,000 to the net worth difference. This result means that higher family incomes matter less when accompanied by ACEs. On this point, a look at the actual coefficients from the two regressions used in the decomposition is informative (see online Appendix Table 2 for regression coefficients). For those without any ACEs, a one dollar increase in parental

income is associated with a 59 cent increase in net worth. For those with ACEs, this increase is just six cents. This finding is consistent with Schurer et al. (2019), who observe that childhood poverty is multidimensional, and not just based on income.

Another large contributor to the difference due to coefficients are AFQT scores, which contribute \$37,000 to the difference. Again, a look at the coefficients themselves is informative. For someone with no ACEs, a 1-point increase in AFQT percentile is associated with a \$2,031 increase in net worth. For those with ACEs, the relationship is much weaker, at \$1,010, just half as much. This finding suggests that the benefits of high aptitude translate less for individuals having experienced ACEs.

On the other hand, college degrees seem to be associated with relatively large increases in net worth for those that have experienced ACEs versus those that have not, subtracting over \$14,000 from the net worth difference. This finding is consistent either with college having a protective role, perhaps by providing access to services, or with selection – those experiencing ACEs who are able to make their way into college could have particularly “perseverant” personalities. It is also worth noting – although very hard to interpret – the large negative constant difference. This difference means that before attributing differences to observed characteristics or coefficients, those with ACEs start out “ahead.” In some way, this finding simply reflects the fact that if characteristics like initial family income and AFQT score matter less in the regression, then having zero values – as represented by the constant – is also less contributory to low net worth. This finding explains how so many of the coefficient differences are positive, yet the contributions of coefficients are small, barely offsetting the constant.

It is also worth noting one key variable where coefficient differences *do not* contribute significantly – lifetime earnings. This finding suggests that, conditional on earning the same amount as those without ACEs, people with ACEs save a similar amount. So, ACEs do not seem to get in the way of saving earned income. Instead, they seem to get in the way of earning that income in the first place.

No Versus One to Two or Three Plus ACEs

To investigate the differential effect of a few versus many ACEs, Table 3a shows decompositions for those with no ACEs versus one or two and Table 3b shows those with no ACEs versus those with three or more ACEs. As mentioned earlier, more ACEs are associated

with a larger difference in net worth. Those with one to two ACEs have net worth nearly \$72,000 lower than those with no ACEs, compared to \$107,000 for those with three plus ACEs.

However, with respect to the portion of the difference due to observables, the two groups appear similar and, if anything, the portion due to observed differences is smaller for those with three plus ACEs. For those with one to two ACEs, \$53,000 of the difference is due to differences in observables, compared to just \$36,000 for those with three plus ACEs. The reason for those observed differences are broad-based, with all of the mechanisms considered mattering – cognitive ability and education, marriage, and earnings playing a significant role for both groups.

The difference between the two groups therefore stems from differences in coefficients. Those with one to two ACEs have coefficient differences contributing an only marginally statistically significant \$14,000 to the overall difference, and those with three plus ACEs having coefficients contributing \$55,000 to the overall difference, which is significant at the 1-percent level. Unfortunately, the small sample size of the three plus ACE group makes identifying the source of this difference challenging, as the contributions of individual variables' coefficients often have large standard errors. So, it seems that those with a few versus many ACEs suffer similar observable consequences, with unobserved differences driving the lower net worth of those with many ACEs.

Limitations

Before discussing results, it is worth noting several limitations inherent to the study (and indeed many studies of ACEs). These include limitations in the ACEs identified in the NLSY79, the issue of attrition, and of missing data.

Identified ACEs

The list of ACEs included in the original Kaiser Permanente study (Felitti, 2019) included ten items, five of which were not available in the NLSY79. These missing ACEs include child sexual abuse, child emotional abuse (we do include emotional neglect), physical neglect, domestic violence against the mother, and the incarceration of a family member. Exclusion of these ACEs has an unclear effect on the analysis. If the current “No ACEs” group actually experienced one of these missing ACEs, then the results may underestimate the gap between those with and without ACEs and the amount attributable to the various mechanisms. After all, some of the people identified as having not experienced an ACE have in fact. Moving

them out of the No ACEs group would presumably further increase the net worth of that group, creating a larger difference to be explained by the analysis. Alternatively, it is possible that these missing ACEs have a smaller effect on net worth than the ones identified in the NLSY79. In this case, the study may overestimate effects of ACEs by including only the most damaging ones.

In addition to the omission of classically identified ACEs, the study also omits expanded ACEs like being a victim of bullying, hate crimes, or theft or being an observer of violence as suggested by Karatekin and Hill (2019). While the inclusion of these ACEs would be informative, it is not possible within the context of the NLSY79. Because the effect of the omitting some traditional and expanded ACEs is unclear, the results should be viewed within the context of the five ACEs included: physical abuse, emotional neglect, family mental illness, family alcohol abuse, and parental separation through divorce or death.

Attrition

The issue of attrition is present in most longitudinal studies. Indeed, attrition is the most common reason NLSY79 sample members are not included in this analysis, as summarized in Table 4. Attrition does not necessarily represent a problem for the analysis. But, systematic attrition would be an issue, especially if an interviewer cannot locate the sample member, a sign of instability in the person's life and possibly also lower net worth. To the extent that this issue is more severe among those with ACEs, then the study may underestimate the relationship between ACEs and net worth.

So, is this sort of systematic attrition occurring? Past research on the NLSY79 suggests that if it is, the effects are minor. Aughinbaugh et al. (2017) found that attrition in the NLSY79 appears "fairly random" and that any existing non-randomness does not appear to bias estimates of key economic relationships, for example between education and earnings. As Olsen (2005) notes, the NLSY79 is a model survey with respect to attrition and uses best practices including an event history design that allows people to re-enter the sample after leaving for a period. Indeed, the majority of attrition observed in Table 4 is by design. Of the 4,833 sample members that left before being included in this study, 58% were members of supplementary oversamples dropped intentionally and thus not emblematic of any systematic issue.³

³ Members of the military supplementary sample were dropped following the 1984 survey and members of the economically disadvantaged, nonblack non-Hispanic sample were dropped following the 1990 survey.

A look at the dependent variable in this study – net worth – largely confirms this sanguine view. For example, the median net worth in 1992 (the year in which the average sample member was 30) was \$16,500 versus \$13,800 for eventual attriters compared to those included in the decomposition analysis, a relatively small difference. In 2000, when individuals were approaching 40, those same numbers were \$49,300 versus \$52,500 respectively, a difference of less than 10%.⁴ So, both the literature on the NLSY79 and our sample suggest attrition is likely not a major weakness of this particular study.

Missing Values

Another limitation of the study is that 2,428 NLSY79 sample members that did not attrite from the sample are missing data on either ACEs, net worth, or one of the independent variables considered in the analysis. Starting with ACEs, it would be problematic if those missing data had vastly different net worth than those with this information. After all, one could imagine that refusing to report or being unable to recall information on ACEs (the two main reasons for non-response other than attrition) could mean that the individual is more likely to have experienced them in their past. And, if net worth is associated with this missing information, then it would affect the conclusions of the study. However, those who do not report full information on ACEs versus those included in the decomposition analysis are fairly similar along this dimension. In 1992, those missing ACEs had a median net worth of \$12,500, compared to \$13,800 for those included in the analysis. In 2000, the numbers were still similar, at \$49,600 and \$52,500 respectively.

For those missing net worth in their 50s – i.e., the dependent variable – a key question is whether they look similar to those in the analysis sample along other dimensions. For most variables, the answer is yes. For example, those missing data on net worth in their 50s are identical to those included in the analysis with respect to the number of ACEs experienced, with 0.94 on average. And, along most of the independent variables, these similarities persist. Those missing net worth in their 50s are perhaps slightly more likely to be female than the analysis

⁴ It is worth noting that the net worth of those that attrite only in 2012 or later seems substantially lower than those that remain in the analysis sample. For example, their median net worth in 2008 was \$50,300 versus \$74,800 for sample members. However, these late attriters represent less than 10% of those that attrite.

sample (56% versus 51%), Black (35% versus 31%), and college educated (40% versus 44%), but these differences are relatively minor. Other independent variables are even more similar.⁵

Finally, there are those missing data on at least one of the independent variables. Here, some reason for concern exists. Those missing at least one of the independent variables are more likely to experience ACEs than the analysis sample (1.26 versus 0.94), and consistently have lower net worth (in 2000, \$11,700 versus \$52,500). Such a pattern could cause the analysis to understate differences between those with and without ACEs, as those with more ACEs and lower net worth are excluded. While it is difficult to quantify the impact of this issue on results, those missing the independent variable represent less than 10% of the overall sample and were included. The effects would likely be to increase, not decrease, gaps in net worth being studied.

Conclusion

The first aim of this study was to investigate the extent to which early-life ACEs were associated with net worth at ages 54 to 61. Findings substantiated that adults who experienced any of the five types of ACEs in the dataset—physical abuse, emotional neglect, family alcohol abuse, family mental health issues, and parental separation—had lower net worth by the time they were in their mid-50s. Group differences were even more pronounced for those with a higher number of ACEs.

These findings quantify how childhood adversities can undermine the long-term financial trajectories of individuals. Results are consistent with early generation research linking ACEs with more narrow outcomes such as socio-economic status, financial distress, or worker performance (e.g., Font & Maquire-Jack 2016; Harter & Harter 2021; Metzler et al. 2017). Results are even more closely aligned with Schurer and colleagues' (2019) longitudinal cohort study in which they calculated the deleterious effect of ACEs on economic outcomes (e.g., monthly earnings) for British adults in their mid-50s. Taken together with prior literature, the results of the current study highlight the toll of ACEs on survivors' long-term financial well-being, a domain deserving consideration alongside physical and mental health.

The second aim of the study was to investigate possible mechanisms through which ACEs affect late-life net worth. Results indicate that observed differences in three areas—education, marital instability, and lifetime earnings—explain a significant portion of the

⁵ Full detail on differences between the portion of the sample missing the dependent variable versus the analysis sample is available on request.

disparities between those with no versus any history of ACEs. While previous literature has documented how child trauma or ACEs undermine educational achievement (Font & Maguire-Jack, 2016; Hardcastle et al., 2018; Otero et al., 2021), our study further demonstrated that this association is a significant pathway that later suppresses net worth in adulthood.

Similarly, empirical studies have found that ACEs increase the odds of social isolation (Vederhus et al. 2022), relational volatility (Anda et al. 2004; Covey et al. 2013; Currie & Widom 2010), and even interpersonal aggression (Goudbout et al. 2019; Herrenhokl et al. 2023; Tuscic et al. 2013) in adulthood. Our results highlighted that the resultant marital instability is a second mechanism that undermines net worth for individuals with ACE histories. ACEs increase the odds of never marrying, which precludes pooling of resources with a spouse. For those that do marry, ACEs also increase the odds of separation or divorce, which can be extremely costly and undermine net worth.

Another pathway identified in this study was reduced lifetime earnings. The empirical literature is well-established that ACEs are associated with employment problems in adulthood (Anda et al. 2004; Liu et al. 2013; Metzler et al. 2017). Workers with histories of ACEs may incur issues such as absenteeism, relational problems with co-workers, substance use, and mental health problems (Anda et al. 2004; Topitzes et al. 2016). These factors often contribute to disruptions in employment, career advancement, and, ultimately, lower earnings even when employed.

Beyond these differences explained by observed characteristics, a remaining portion of the difference is due to the fact that ACEs seem to limit the benefit of protective factors. For example, an extra dollar of family income in an individual's late teens had just one-tenth the association with later life net worth for an individual with ACEs versus one without. It appears as if the negative effects of ACEs on future financial outcomes defy some elements of early advantage, which aligns with a major finding in Schurer et al.'s study (2019). So, while ACEs occur more frequently in households with lower income families, ACEs that occur in privileged (i.e., higher income) families also undermine financial health.

These pathways illustrate the complex, multi-faceted nature of how ACEs reduce long-term net worth. Marital instability and lifetime earnings explained the largest share of the observed differences, but education was also confirmed as a contributor. Plus, some of the differences were "unexplained," and thus likely only targetable through prevention. As such, no

single solution or “silver bullet” exists that could address the group disparities. Instead, a broader, more holistic remedy is needed.

The most promising way of addressing the consequences of ACEs would likely combine high-quality pre-school with some element of in-home visitation or parental training for at-risk families. High-quality preschool has been shown to limit exactly the sorts of externalizing behaviors – e.g., swearing, aggression towards others – that follows from ACEs and that destabilizes relationships and employment (e.g., see Heckman et al. 2010). And while evidence is slightly weaker, in-home visitation and parental training has been shown to make a difference in rates of maltreatment (e.g., see Mersky et al. 2011).

Indeed, it is exactly the value of this solution that most merits future research. Little work we are aware of has examined how early childhood interventions like high-quality preschool alters the effect of ACEs on longer-term outcomes. While research has examined extensively the benefits of these programs on average, less has been produced about their effect specifically for those experiencing events like ACEs. The answer is not obvious. On the one hand, ACEs reduce the benefits of family income, so they may also limit the benefit of these programs. Then again, Kline and Walters (2016) find that Head Start programs may benefit children with the lowest probability of attending in the first place – likely a group that overlaps those with ACEs. Understanding whether or not high-quality preschools can have similar benefits to those experiencing ACEs is a worthy topic – after all, these programs are likely the most concrete way to address the multi-dimensional consequences of these experiences on children.

Table 1. *Descriptive Statistics by Presence and Number of ACEs*

	Full Sample	None versus Any		By ACE Dose	
		No ACEs	Any Aces	1-2ACES	3+ ACEs
# of Observations	5,103	2,333	2,770	2,294	476
Female	51.2%	48.1%	53.8%	51.7%	63.4%
Race/Ethnicity					
White, Non-Hispanic	47.6%	51.8%	44.0%	42.2%	52.9%
Black, Non-Hispanic	30.9%	28.1%	33.2%	36.4%	17.9%
Hispanic	18.6%	17.2%	19.7%	19.1%	22.7%
Asian, Pacific Islander	0.6%	0.7%	0.5%	0.4%	0.8%
Native American	2.4%	2.2%	2.5%	1.8%	5.7%
Parental Background					
Mother's Education	10.3	10.6	10.1	10.2	9.9
- Miss. Moth. Ed.	3.7%	3.0%	4.3%	4.3%	4.6%
Father's Education	9.7	10.2	9.2	9.2	9.5
- Miss. Fath. Ed.	9.7%	6.1%	12.8%	13.3%	10.3%
Parents Ever Married	88.0%	88.0%	88.0%	87.5%	90.5%
Med. 1978 Inc (\$2018)	\$43,142	\$53,882	\$34,096	\$33,484	\$35,147
- Missing Fam. Inc.	17.7%	18.1%	17.4%	17.8%	15.5%
Testing/Ed					
AFQT Percentile	39	41	36	36	38
HS Dropout	9.0%	7.2%	10.4%	10.4%	10.5%
HS Grad, No College	44.0%	44.3%	43.8%	43.9%	42.9%
Some College, No Degree	24.8%	24.0%	25.5%	24.8%	29.0%
College Degree	22.2%	24.5%	20.3%	20.8%	17.6%
Marriage					
Never Married	16.2%	14.2%	17.9%	19.2%	11.3%
Divorced, Given Ever Married	51.6%	45.2%	57.1%	55.6%	63.5%
Total # Surveys Married	12.1	12.9	11.3	11.2	11.7
Married at Net Worth Obs.	56.2%	61.1%	52.1%	52.2%	51.5%

Note: Includes only individuals included in the Oaxaca Decomposition sample from Table 2.

Source: Authors' calculations from the *National Longitudinal Survey of Youth 1979 Cohort (NLSY79)*, 1979-2018.

Table 2. *Decomposition Results for No Versus Any ACEs*

Variable	Observed		Unexplained (Coefficients)		Interaction	
	Value	Standard Error	Value	Standard Error	Value	Standard Error
<i>Demographic</i>						
Female	-965.93	(665.86)	16,502.82*	(9,572.72)	-1,725.07	(1,088.99)
Black	4,673.39***	(1,372.30)	4,155.66	(7,250.96)	-642.82	(1,133.06)
Asian/Pacific Islander	132.10	(275.43)	674.38	(905.78)	240.71	(429.81)
Hispanic	905.98	(570.74)	10,022.10*	(5,395.27)	-1,277.05	(880.44)
Native American	154.95	(266.23)	501.65	(1,184.37)	-52.78	(151.12)
<i>Family Background</i>						
Mother Highest Grade	1,339.08	(973.43)	39,009.17	(36,527.53)	1,826.87	(1,757.26)
Don't know mother ed	-628.82	(405.64)	282.53	(1,988.98)	-86.85	(612.32)
Father Highest Grade	2,331.09	(1,900.14)	-14,189.95	(27,945.38)	-1,566.21	(3,091.53)
Don't Know Father Ed	-1,289.58	(1,310.12)	-1,075.46	(4,488.42)	564.70	(2,357.56)
Parents Ever Married	1.18	(66.66)	17,434.59	(20,305.63)	-3.20	(180.92)
Total Family Income, 1979	971.89	(2,486.68)	23,676.27**	(11,049.95)	8,337.73**	(3,955.32)
Missing Total Family Income, 1979	107.86	(193.01)	2,078.09	(4,268.78)	87.23	(220.41)
<i>Cognitive/Education</i>						
AFQT Percentile	4,679.54***	(1,645.95)	37,212.11**	(16,923.86)	4,728.60**	(2,298.49)
High School No College	198.67	(493.89)	-10,316.42	(8,391.50)	-133.48	(346.43)
Some College	-399.77	(395.94)	826.71	(6,749.73)	-50.62	(415.17)
Bachelors or More	7,053.00***	(2,155.38)	-14,205.21**	(7,084.53)	-2,960.92*	(1,686.27)
<i>Marriage</i>						
Never Married	412.17	(605.11)	8,582.89*	(4,999.77)	-1,768.59	(1,139.71)
Ever Divorced	4,358.88***	(1,323.08)	10,987.94	(10,113.39)	-1,891.84	(1,770.87)
Total Surveys Married	5,520.13***	(1,677.25)	10,165.46	(16,483.34)	1,417.80	(2,308.91)
Married at Net Worth						
Observation	7,313.14***	(1,684.19)	3,107.74	(12,167.55)	541.18	(2,120.43)
<i>Lifetime Earnings</i>						
Total Observed Earnings, \$2018	15,289.60***	(3,445.53)	-6,366.53	(18,997.90)	-1,418.20	(4,236.20)
Constant			-117,739.92**	(52,040.46)		
Number of Observations			5,103			

Note: Robust standard error in parenthesis. ***indicates $p < 0.01$, ** indicates $p < 0.05$, * indicates $p < 0.1$.

Source: Authors' analysis of National Longitudinal Survey of Youth 1979 Cohort (1979-2018).

Table 3a. *Decomposition Results for No Versus 1-2 ACEs*

Variable	Observed		Unexplained (Coefficients)		Interaction	
	Value	Standard Error	Value	Standard Error	Value	Standard Error
<i>Demographic</i>						
Female	-598.69	(492.70)	16,194.89*	(9,485.14)	-1,129.31	(805.30)
Black	8,335.57***	(1,915.77)	7,894.13	(8,491.59)	-1,805.25	(1,963.82)
Asian/Pacific Islander	424.62	(551.00)	160.14	(891.68)	91.80	(516.66)
Hispanic	1,051.70	(715.75)	13,382.29**	(5,451.65)	-1,332.74	(959.47)
Native American	-371.28	(426.00)	994.13	(1,042.42)	216.12	(317.69)
<i>Family Background</i>						
Mother Highest Grade	1,523.94	(1,019.42)	32,491.21	(37,808.96)	1,400.58	(1,667.06)
Don't Know Mother Ed	-786.74	(480.00)	-347.32	(2,018.60)	103.38	(602.42)
Father Highest Grade	1,345.98	(2,293.04)	-4,524.45	(29,346.20)	-533.86	(3,463.43)
Don't Know Father Ed	-323.27	(1,549.21)	842.32	(4,825.63)	-457.98	(2,624.17)
Parents Ever Married	18.52	(89.69)	7,766.21	(20,223.68)	45.20	(145.55)
Total Family Income, 1979	-90.01	(2,571.79)	27,032.86**	(11,530.91)	9,071.13**	(3,959.30)
Missing Total Family Income, 1979	26.00	(102.49)	3,412.48	(4,542.22)	66.32	(233.86)
<i>Cognitive/Education</i>						
AFQT Percentile	4,508.63**	(1,873.53)	40,195.47**	(17,766.15)	5,442.25**	(2,578.10)
High School No College	81.23	(315.96)	-4,334.67	(8,799.62)	-37.48	(162.91)
Some College	-190.83	(321.54)	1,534.84	(6,820.58)	-52.18	(244.69)
Bachelors or More	5,942.48***	(2,170.24)	-13,477.68*	(7,599.12)	-2,380.81	(1,557.42)
<i>Marriage</i>						
Never Married	1,427.00	(946.30)	12,528.41**	(5,576.70)	-3,282.19**	(1,619.90)
Ever Divorced	4,216.43***	(1,360.02)	17,262.84*	(10,153.21)	-2,348.56	(1,488.31)
Total Surveys Married	6,373.27***	(1,979.10)	6,310.98	(17,231.15)	934.00	(2,554.02)
Married at Net Worth Observation	5,916.15***	(1,710.44)	10,692.16	(12,822.41)	1,832.60	(2,217.46)
<i>Lifetime Earnings</i>						
Total Observed Earnings, \$2018	14,570.13***	(3,620.18)	-9,387.87	(20,439.14)	-1,877.90	(4,098.54)
Constant			-152,329.13***	(54,819.80)		
Number of Observations			4,627			

Note: Robust standard error in parenthesis. *** indicates $p < 0.01$, ** indicates $p < 0.05$, * indicates $p < 0.1$.

Source: Authors' analysis of National Longitudinal Survey of Youth 1979 Cohort (1979-2018).

Table 3b. *Decomposition Results for No Versus 3+ ACEs*

Variable	Observed		Unexplained (Coefficients)		Interaction	
	Value	Standard Error	Value	Standard Error	Value	Standard Error
<i>Demographic</i>						
Female	-4,237.85	(4,319.67)	12,822.38	(19,779.81)	-3,094.15	(4,797.24)
Black	-8,315.15***	(3,189.54)	521.80	(5,673.01)	298.58	(3,246.62)
Asian/Pacific Islander	357.08	(1,047.71)	3,678.52*	(2,142.70)	-676.42	(1,990.67)
Hispanic	-1,665.82	(2,273.45)	-3,578.92	(10,329.86)	860.94	(2,505.33)
Native American	-391.38	(1,609.90)	-2,855.92	(3,315.55)	1,733.70	(2,062.78)
<i>Family Background</i>						
Mother Highest Grade	-867.34	(3,123.46)	79,749.07	(56,514.53)	5,196.84	(3,982.77)
Don't know mother ed	399.59	(958.28)	3,622.84	(3,281.67)	-1,270.95	(1,379.18)
Father Highest Grade	5,279.11*	(3,160.89)	-63,176.61	(42,050.80)	-4,741.89	(3,517.34)
Don't Know Father Ed	-3,968.15	(2,456.48)	-8,599.54	(5,903.94)	3,514.91	(2,669.14)
Parents Ever Married	1,864.50	(1,800.13)	77,589.75	(52,832.73)	-2,183.34	(1,965.97)
Total Family Income, 1979	1,445.86	(8,363.86)	21,554.07	(20,699.21)	9,446.94	(9,120.39)
Missing Total Family Income, 1979	601.66	(1,058.53)	533.74	(6,553.37)	88.75	(1,091.46)
<i>Cognitive/Education</i>						
AFQT Percentile	5,059.66*	(2,921.34)	19,555.78	(27,479.48)	1,732.91	(2,527.66)
High School No College	1,285.80	(2,216.67)	-32,718.60***	(12,125.69)	-1,117.27	(1,946.70)
Some College	-1,423.77	(1,850.30)	150.29	(11,745.82)	-26.08	(2,038.33)
Bachelors or More	11,611.97**	(4,598.98)	-12,748.86	(9,597.18)	-4,963.66	(3,966.23)
<i>Marriage</i>						
Never Married	1,356.83	(1,493.69)	-1,234.90	(5,714.07)	-309.49	(1,442.41)
Ever Divorced	-5,318.38	(5,445.02)	-34,316.10*	(19,801.51)	10,673.03*	(6,328.16)
Total Surveys Married	1,020.91	(2,281.38)	41,326.01	(26,140.64)	4,137.03	(2,986.79)
Married at Net Worth Observation	14,383.52***	(4,705.87)	-32,103.53*	(18,136.74)	-6,020.47	(3,733.45)
<i>Lifetime Earnings</i>						
Total Observed Earnings, \$2018	17,404.46**	(8,062.22)	6,221.23	(25,415.42)	2,149.77	(8,788.96)
Constant			-20,774.43	(83,863.76)		
Number of Observations			2,809			

Note: Robust standard error in parenthesis. ***indicates $p < 0.01$, ** indicates $p < 0.05$, * indicates $p < 0.1$.

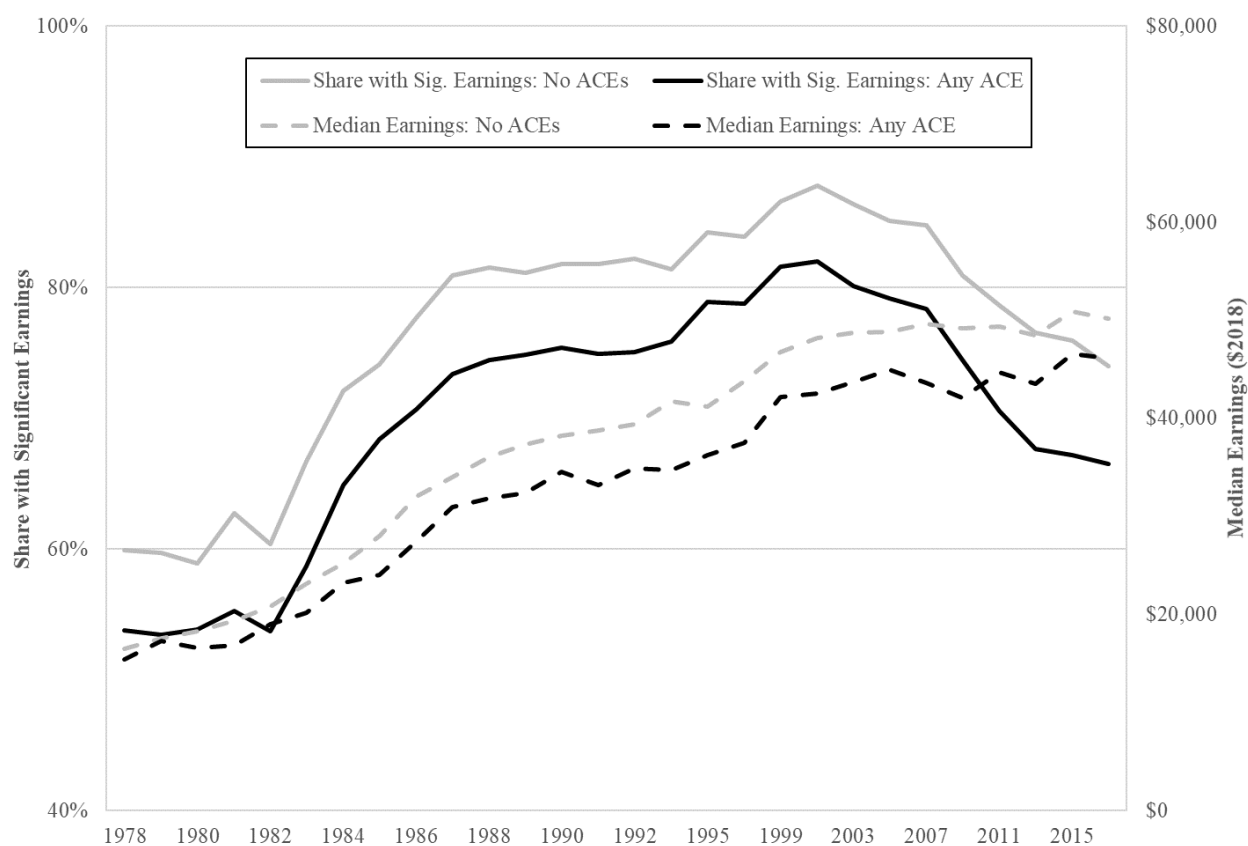
Source: Authors' analysis of National Longitudinal Survey of Youth 1979 Cohort (1979-2018).

Table 4. *Analysis Sample and Reason for Exclusion*

	Number	Share
Included in Analysis	5,103	40.2%
<i>Not Included in Analysis</i>		
Attrition	4,833	38.1%
Missing ACE Information	751	5.9%
Missing Dependent Variable	934	7.4%
Missing Independent Variable	743	5.9%
Trimmed for Net Worth	322	2.5%
Total	12,686	100%

Source: Authors' analysis of National Longitudinal Survey of Youth 1979 Cohort (1979-2018).

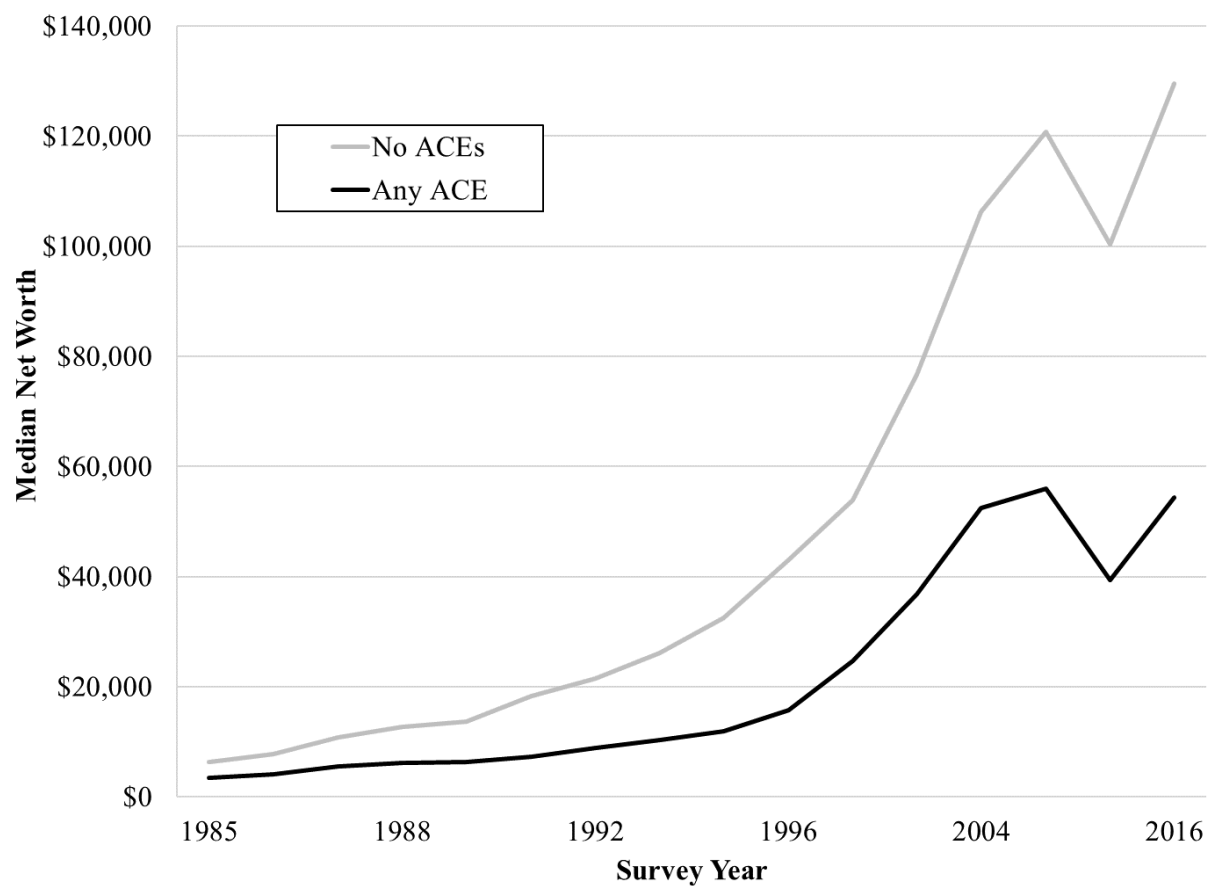
Figure 1. *Share of Workers with Significant Earnings and Median Earnings if Earning, by ACE Status (2018 Dollars)*



Note: Includes only individuals included in the Oaxaca Decomposition sample from Table 2.

Source: Authors' calculations from the *National Longitudinal Survey of Youth 1979 Cohort (NLSY79)*, 1979-2018.

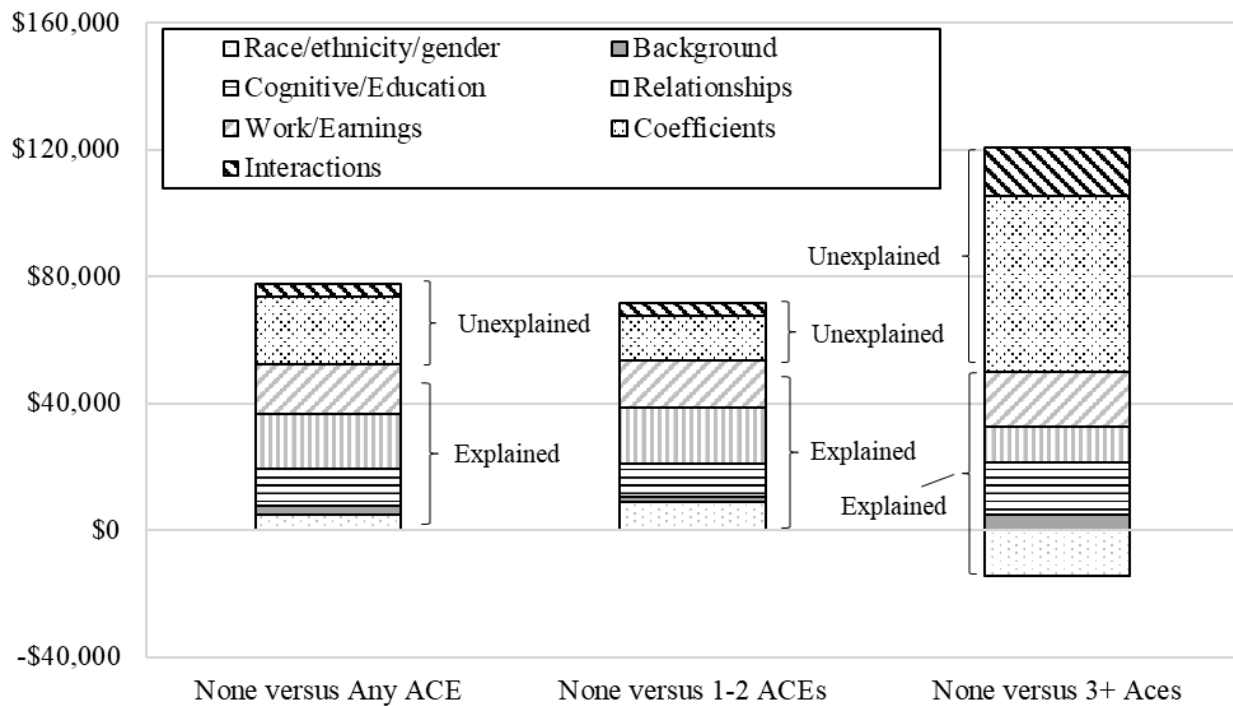
Figure 2. *Net Worth, by ACE Status (2018 Dollars)*



Note: Includes only individuals included in the Oaxaca Decomposition sample from Table 2.

Source: Authors' calculations from the *National Longitudinal Survey of Youth 1979 Cohort (NLSY79)*, 1985-2016.

Figure 3. Summary of Findings on “Explained” versus “Unexplained” Differences



Source: Authors’ calculations from the *National Longitudinal Survey of Youth 1979 Cohort (NLSY79)*, 1985-2016.

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