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Do Parental Assets Matter for Children's Educational Attainment?:

Evidence from Mediation Tests

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Youngmi Kim
Center for Social Development

Michael Sherraden
Center for Social Development

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Campus Box 1196 One Brookings Drive St. Louis, MO 63130-9906 • (314) 935.7433 • csd.wustl.edu

Do Parental Assets Matter for Children's Educational Attainment?: Evidence from Mediation Tests

This study investigates (1) the effects of parental assets on children's educational attainment from high school completion to college degree attainment, and (2) mediating roles played by parental involvement, child's educational expectations, and child's self-esteem. The study sample (N=632) is drawn from the Child and Young Adult data supplement to the National Longitudinal Study of Youth 1979. Results indicate that parental assets are associated with children's later educational attainment. Financial assets and home-ownership are significantly associated with high school completion and college attendance. In addition, family income becomes non-significant when specific measures of assets and liabilities are taken into account. Non-financial assets and income are significant predictors of college degree attainment. Children's educational expectations mediate the effect of financial assets on high school completion. Empirical evidence provides support for asset-building programs and policies designed to promote long-term educational attainment.

Key words: *parental assets, educational expectations, educational attainment, Child Development Accounts*

Introduction

A low level of educational attainment often translates into less income and unstable employment in the labor market over the life course. This is increasingly true in a global economy that requires more sophisticated training and education. Although educational attainment levels have increased during the last few decades, researchers and policymakers are concerned that disparity in educational attainment mirrors unequal distribution of economic resources.

The common wisdom is that investment in better schooling will bring high returns in the form of future earning potential, and most parents would gladly allocate money to improve their children's human capital (Becker, 1979, 1991, 1993; Haveman & Wolfe, 1994). However, families with limited economic resources often face borrowing constraints, especially when financing post-secondary education, because of uncertainty in an imperfect capital market whether future earnings compensate for the borrowing money (Ellwood & Kane, 2000; Kane 1994, 1996).

Traditional models of intergenerational transmission of economic resources have focused mainly on parents' income as a representation of parental resources. However, scholars have begun to pay more attention to the roles of parental assets in children's educational attainment (Caner & Wolff, 2004; Cha, Weagley, & Reynolds, 2005; Conley, 2001; Morgan & Kim, 2006; Nam & Huang, 2009; Oliver & Shapiro, 1997; Sherraden, 1991; Williams Shanks, Kim, Loke, & Destin, 2010; Zhan & Sherraden, 2003, 2009). Assets appear to predict educational attainment independently from income; moreover, assets may encourage economic and social development of individuals in the family beyond consumption (Conley, 2001; Paxton, 2001; Sherraden, 1991).

While parents' economic status is evidently crucial, it alone cannot explain total variations in children's educational outcomes. Recent academic work poses questions about how other (usually unmeasured) characteristics may mediate the ways in which parental economic status affects children's educational outcomes (Mayer, 1997; Orr, 2003; Williams Shanks, 2007; Williams Shanks, Kim, Loke, Destin, 2010; Yeung & Conley, 2008; Zhan, 2006; Zhan & Sherraden, 2003, 2009). It matters how parents allocate diverse forms of resources and attention to children. For instance, time spent with parents may essentially supplement the function of money and vice versa (Becker, 1991, 1993; Leibowitz, 1974). Parents' nurturing and monitoring time may impact children's school performance (Baumrind, 1966; Becker, 1991, 1993; Maccoby & Martin, 1983), and quality of time spent may offset limitations in quantity (Leibowitz, 1974). The home environment perspective posits that children's outcomes may be accounted for by parents' active investment in the physical environment, supportive materials, and a wide range of activities (Furstenberg & Hughes, 1995; Totsika & Sylva, 2004).

Children's attitudes and behaviors are important factors in determining educational outcomes, and these may be largely formed by parental influence. Children with a higher level of expectations and aspirations invest more time and effort in academic achievement and thus may have a greater likelihood of higher educational attainment (Cook et al., 1996; Elliott, 2009; Mickelson, 1990; Reynolds & Pemberton, 2001). Similarly, children's self-esteem may have a positive effect on educational achievement because it promotes greater academic engagement and self-control (Liu, Kaplan, & Risser, 1992; Sterbin & Rakow, 1996).

However, there is still no consensus on how assets may contribute to children's educational attainment. Impacts of assets on educational attainment are unclear. Do diverse forms of assets and liabilities result in different impacts? Does the impact of parental economic resources vary across different types of educational attainment? In addition, there is little evidence on mediating pathways. In particular, we do not yet know whether impacts of parental economic resources on educational attainment work through social-psychological characteristics. To explore these unresolved questions, this study incorporates alternative types of parental economic resources and mediating pathways into the traditional income-educational attainment model.

Background

Assets and children's educational attainment

Emerging empirical research has investigated independent effects of assets on children's educational outcomes, after controlling for income and other socioeconomic characteristics, while most studies have mostly employed income alone to represent parental economic resources.

Using data from the Panel Study of Income Dynamics (PSID), Conley (2001) provides evidence that wealth has distinct properties from income in explaining children's higher education. He finds that a significant effect of income on children's post-secondary education disappears when net worth is controlled for. Parental net worth has a significant effect on total years of schooling, post-high school years of schooling, and college attendance, although no significant impact is found on Bachelor's degree attainment and further graduate schooling. Using different types of assets in PSID data, Nam and Huang (2009) report that liquid assets are significantly associated with high school graduation and college attendance, and family income statistically predicts college graduation.

Compared to children from households with zero liquid assets, those from households with a negative level of liquid assets are more likely to complete high school but less likely to graduate from college.

Another study (Huang, Guo, Kim, & Sherraden, 2010) that tested two competing theories—short-term borrowing constraints and long-term family background—with PSID data finds that both income and assets in early childhood are significantly associated with children's college entry and that household assets in late adolescence are also significant predictors. Significant effects of household assets during the child's adolescence suggest that household assets are important to financially support the opportunity for children to attend college. Also, a significant indirect effect of liquid assets in early childhood that operated through child's academic ability implied that these liquid assets may work by promoting educational investment for children.

Assets, potential mediating mechanisms, and educational outcomes

Another large body of empirical research has investigated whether non-monetary characteristics are equally critical and whether parental economic resources are linked to children's outcomes through non-monetary mediators. There is a large body of research examining family income and child educational outcomes with potential mediators, but there is relatively little work with parental assets.

Zhan and Sherraden (2003), utilizing the National Survey of Families and Household data, find that savings of $3,000 or more has a positive effect on a children's high school graduation, and that home ownership has a significant relationship with children's academic performance in high school. Also, parental expectations for a child's education partially mediate each of these significant relationships. The income effect becomes insignificant when assets are added to the model. Another recent study by Zhan and Sherraden (2009) using the National Longitudinal Study of Youth (NLSY79) data indicates that financial assets and non-financial assets are positively associated with Bachelor's degree attainment, while unsecured debt is negatively associated. While financial assets are significantly related to expectations of children and parents, there are no significant mediating effects.

Impacts of parental assets and the mediating roles of other characteristics have been studied in relation to educational achievement, often measured in test scores or GPA, as well as educational attainment. Most studies of the relationship between assets and educational achievement have been conducted with children younger than high school age. Using a sample of children 5-14 years old in NLSY79 data, Orr (2003) reports that family net worth is positively associated with math test scores, and the achievement test score gap between Whites and African-Americans greatly decreases after assets are taken into account. Also, the study emphasizes that types of assets might matter, based on the finding that income-producing assets, such as financial assets, are significant predictors, but non-income producing assets are not. The impact of assets is mediated by cultural capital opportunities (measured by extra-curricular activities or outings). Orr's supplementary analyses with different age groups finds that social capital (measured by parents' reading frequency for children aged 5-9 and parental assistance in homework for those aged 10 or older) is positively associated with academic achievement of younger children, but negatively associated with educational achievement of older children. This suggests that parents' involvement in education may have a different meaning depending on children's age or academic ability. For example, a higher degree of parental involvement may result from children's academic difficulty in higher grades. Using the same data,

Zhan (2006) finds that parental net worth is positively associated with children's Peabody Individual Achievement Test (PIAT) reading and math scores, and parental expectations partially mediated the effect of net worth on both test scores. However, parental involvement did not have mediating effects.

Yeung and Conley (2008) utilize the first wave of 1997 CDS in the PSID and report that asset effects vary by children's developmental stage and types of educational outcomes. Family assets, particularly liquid-type assets, have stronger effects for school-aged children (ages 6-12) than for preschoolers (ages 3-5), and unsecured debt is negatively associated with reading and math test scores for preschoolers, but only math scores for school-aged children. The authors conclude that family wealth may promote financial security, future orientation, and desirable socio-psychological characteristics that benefit child development and may promote higher education attainment and success in young adulthood.

Overall, empirical studies including economic resources and potential mediating pathways suggest that parental assets generally have positive effects on educational outcomes, and that income effects tend to disappear when assets are considered. It is unclear, however, how different types of parental economic resources work for different kinds of educational attainment. Another limitation of previous research is that mediating pathways are more likely to be investigated with educational achievement (measured by test scores or GPA) than with educational attainment (measured by levels of completed education). Overall, there are mixed findings on mediating effects by type of mediators, children's age, and form of educational outcomes.

Building on aforementioned studies, we examine the mechanisms by which financial and non-financial factors influence children's educational attainment, with special attention to the role of parental assets and potential mediating pathways. Specific aims are as follows: First, we examine types of parental economic resources associated with children's educational attainment. Second, we examine whether impacts of parental economic resources on educational milestones vary by type of educational attainment: high school completion, college attendance, and college degree attainment. Third, we examine whether parental involvement, children's educational expectations, and children's self-esteem mediate the effects of parental economic resources on children's educational attainment.

Method

Data

Data come from two sources in the National Longitudinal Survey of Youth 79: (1) NLSY79 main and (2) NLSY79 Child/Young Adults (NLSY79 Child/YA). The NLSY79 main data were first gathered from interviews with 12,686 men and women aged 14-21 in 1979 and collected annually from 1979 through 1994 and biannually thereafter. The NLSY79 Child/YA data have been collected biannually on "younger children" aged 14 or younger since 1986 (NLSY79 Child data) and "young adults" aged 15 or older from 1994 (NLSY79 YA data). [1] In the supplement data, additional information on children's educational, social/behavioral, and psychological assessments have been

[1] While children of the NLSY79 female respondents are termed "children of the NLSY79", children aged younger than 15 are referred to as "younger children" and those 15 or older are called "young adults."

gathered from the NLSY79 female respondents (mothers of children) and their children (See Center for Human Resource Research (2006) for details).

For this study, variables related to characteristics of the mother and family are drawn from the NLSY79 main data, and the other variables from the NLSY Child/YA data. The NLSY79 data are chosen because (1) the multi-year longitudinal data collection enables the examination of educational attainment trajectory and academic performance from younger childhood to young adulthood; (2) the data provides information on diverse measures of parental wealth; (3) the data provides rich assessments of child development reported by both mother and child.

Sample

The study sample consists of children who were enrolled as 9th and 10th graders in 1996 or 1998, given the study purpose of examining educational attainment from the beginning of high school through young adulthood. Although students in 10th grade are generally not considered an entering high school class, they are included in the two cohorts because they are assumed to have been enrolled as 9th graders in 1995 or 1997 when NLSY79 data was not collected due to the biennial cycle of data collection. Accordingly, the sample is selected from two different years, not to compare cohorts but for the purpose of drawing more sample cases.

This study excludes some cases using several criteria. First, children who did not live with their mother when they were in 9th/10th grade in 1996 or 1998 are excluded because one important focus of this study is interaction between mother and child. Second, one sample case is excluded because the age reported—23 years old—is beyond the normal age range of high school students. Third, children not in the 2004 survey (for children sampled in 1996) or the 2006 survey (for those sampled in 1998) are excluded because this study is designed to track educational outcomes of interest for the same eight-year period.[2] Fourth, those who had a missing value among the independent and mediating variables are excluded to make the study findings comparable across different empirical models.[3] In sum, the final full sample of 632 children has been drawn on the basis of high school class grades in 1996 and 1998,[4] and an equal number of cases is utilized in all the analyses.

Measures

Dependent variables of interest are educational attainment indicators: *high school completion*, *college attendance*, and *college degree attainment*. The dichotomous variables are measured by whether a child had reached a particular level of educational attainment between 1996 and 2004 for children drawn from the 1996 data, or between 1998 and 2006 for children drawn from the 1998 data. *High school completion* is measured by whether a child successfully graduated from high school with a diploma or passed a GED (Graduate Equivalency Diploma)/high school equivalency test. *College attendance* is

[2] The dependent variables, educational outcomes, are measured in 8 years. See descriptions of measures for details.
[3] Children with any missing (those excluded from the final sample) were not statistically different from those without any missing in terms of observed key demographic characteristics of child and mother. Although several bivariate tests indicate that those who were dropped from the study analyses due to missing information are similar to the study sample, missing data were not imputed because data imputation generally requires a completely random pattern of missing (Little & Rubin, 1987) but it cannot be completely guaranteed.
[4] Children sampled in 1996 data were 305, and those sampled in 1998 data were 327. Also, about 12% of the children were from the same mother: 555 mothers for 632 children.

measured by whether a child had ever enrolled in a 2-year or 4-year college, and *college degree attainment* is measured by whether a child had obtained any kind of post-secondary academic degree.

Main independent variables are parental economic resources: four types of parental assets (*net worth*, *gross financial assets*, *gross non-financial assets*, and *homeownership*), two types of liabilities (*unsecured* and *secured debt*), and *family income*. Assets and liabilities are obtained from the data collected in either 1996 or 1998 when children were in 9th or 10th grade, respectively. The total family *net worth* indicates asset values in dollars possessed by the child's mother and her spouse (if any): sum of values of home, savings, stocks/bonds, (estate or investment) trusts, business assets, car, IRAs, tax-deferred plans (e.g., 401Ks), CDs, and any other possessions net of debts. The variable *gross financial assets* is created by summing amounts in bank accounts, money assets like CDs or any personal loans, IRAs/Keoughs, and tax-deferred plans. *Gross non-financial assets* is calculated from total values of residential and non-residential properties (businesses, farms, or vehicles). *Home ownership* is measured as a dichotomous measure (1=home owner, 0=otherwise). Together with assets, two types of liability are measured: unsecured debt and secured debt.[5] *Unsecured debt* indicates amounts owed over $500 to any stores, doctors, hospitals, banks, or anyone else (personal liabilities); *secured debt* is created by summing the total amount of debt owed on non-financial assets (residential and non-residential properties). Another economic predictor, *family income*, is measured in dollars based on all income sources of family members received in the past calendar year. Economists consider the average of multiple years of permanent income to be a more accurate proxy of permanent income than a one-year income measure, given short-term fluctuations in income (Mayer, 1997). Thus, mean values of family income over three years are computed as follows: collected in 1992, 1994, and 1996 for children in 9th/10th grade in 1996; and collected in 1994, 1996, and 1998 for children in 9th/10th grade in 1998.[6] Each value of the continuous economic measures is inflation-adjusted to 1998 dollars using the Consumer Price Index.[7] Also, consistent with previous studies, all of the continuous measures have been log-transformed for regression analyses because distributions of the economic resources are quite skewed.

Three variables are included to examine a possible mediating role in the effects of parental economic resources on child's educational attainment: *parental involvement in child's education*, *child's educational expectations*, and *child's self-esteem*. *Parental involvement in child's education* is measured by 15 items on a 4-point Likert scale (0=Never, 1=Rarely, 2=Sometimes, 3=Often). These items regard at-home involvement in child's academic work, home supervision by rules, and communicating about child's school activities. A summary indicator has been created by calculating a total score, with higher scores presenting a higher level of parental involvement (Standardized Cronbach $\alpha = 0.80$). *Child's educational expectations* are measured by a question "what is the highest grade or year you think you will actually complete?", with responses ranging from 1st grade (=1) to more than 5 years of college (=18). Child's global level of *self-esteem* was measured by the Rosenberg self-esteem scale (Rosenberg, 1965), consisting of ten items on a four-point scale from strongly disagree (=1) to strongly agree (=4), where higher scores indicate a higher level of self-esteem (Standardized Cronbach $\alpha = 0.89$). The three hypothesized mediating variables are reported by the child.

[5] While most empirical studies generally include measures of assets net of debt, this study employs measures of assets and liabilities in the same analyses, instead of subtracting liabilities from values of financial and non-financial assets.
[6] The NLSY79 data has been collected biannually since 1994. Although family income data collected in 1993 are available for those sampled in 1996, income data from the three-year of 1992, 1994, and 1996 are employed to be consistent with income measure for the sample drawn in 1998.
[7] Retrieved from ftp://ftp.bls.gov/pub/special.requests/cpi/cpiai.txt.

Other characteristics of child, mother, and family are employed as control variables: c*hild's gender* (female=1; male=0), *child's age*, *child's birth order, family size*, and *child's residence* (lived in an urban area=1), *child's race/ethnicity (*non-African-American/non-Hispanic, African-American, or Hispanic), *mother's marital status* (never-married; currently married; or separated, divorced, or widowed), *mother's education* (not a high school graduate, high school completion, and some college or higher), and *mother's age*. Child's cognitive ability is measured by three standardized test scores, *PIAT (Peabody Individual Achievement Test) Mathematics, PIAT Reading Recognition*, and *PIAT Reading Comprehension*.[8] *School quality* is included to control for school characteristics. A total score has been computed by using the child's report on how well eight items on a four-point scale (1=very true to 4=not at all true) describe the school, including items related to making friends, teachers, classes, and overall school environment. Higher scores indicate more positive school quality assessed by the child (Standardized Cronbach's $\alpha = 0.66$). Most of the control variables are measured when the child was in the $9^{th}/10^{th}$ grade, while child's cognitive ability is measured in earlier childhood before the child has reached the age of 15.

Analytical models

The main analyses are conducted with logistic regression to examine the effects of parental economic resources and the hypothesized mediators on the child's educational outcomes. OLS regression is additionally used in the process of testing mediation roles of parental involvement, child's educational expectations, and child's self-esteem because the three hypothesized mediators are continuous measures. In both logistic and OLS regression analyses, the children are clustered by mother's ID to adjust for standard errors caused by multiple children from the same mother sharing common family characteristics (Greene, 2003). Also, all analyses have been conducted with weighted data to generate estimates from a nationally representative sample. The weighted analyses adjust over-representation of African American and Hispanic youth and oversampling of economically disadvantaged Whites in NLSY79 (Center for Human Resource Research, 2008).

Main analyses consist of six logistic regression models (models 1 to 6): models 1 and 2 are logistic regression models for high school completion; models 3 and 4 for college attendance; and models 5 and 6 for college degree attainment. Models 1, 3, and 5 are logistic regression analyses for each type of educational attainment respectively before the hypothesized mediators are included, while models 2, 4, and 6 are the corresponding analyses with mediators included.

In addition, the six main models (models 1 through 6) have four corresponding sub-models (models A, B, C, and D) that take into account different types of parental economic resources. Model A employs income alone; model B includes income and net worth to examine the effect of parental assets; model C employs financial assets, unsecured debt, and a dummy indicator of home ownership; and model D includes financial assets, non-financial assets, unsecured debt, and secured debt. For instance, model 1A tests only the effect of family income on high school completion, while model 1B additionally examines the effect of net worth, controlling for family income; model 1C and model 1D assess whether different types of assets and liabilities have different effects on high school completion, along with family income, controlling for other factors. In other words, the

[8] The tests are well-known measures to assess child's academic achievement and ability in mathematics and reading, as taught in general educational setting, for children aged five years or older. For more detailed information on the tests, see NLSY79 child and young adult data user's guide (Center for Human Resource Research, 2008).

equivalent four sub-models by various types of economic resources (models A through D) are presented for each of the six main models (models 1 through 6). The four additional sub-models examine distinct effects of different types of assets and liabilities and prevent a multi-collinearity problem in accounting for the constructs of assets and liabilities in the same empirical analyses.

Hypothesized mediating effects are tested by using the regression strategy of Baron and Kenny (1986). As a first step, each hypothesized mediator is regressed on the independent variables (parental economic resources) in the OLS regression model. Second, each dependent variable (child's educational attainment) is regressed on the independent variables with logistic regression analysis. Third, dependent variables are regressed on both the independent variables and the hypothesized mediators in logistic regression models. The third step examines whether the associations between economic resources and child's educational outcomes are no longer significant (or associated at a lower level of significance) or the regression coefficients decrease after the hypothesized mediators are entered into the models.

In addition, robustness tests (models 7 and 8) are conducted on the outcome of graduating from high school with a diploma. Model 7 (7A through 7D) examined effects of different types of economic resources on high school graduation with a diploma, and model 8 (8A through 8D) included the three hypothesized mediators in the corresponding model 7 (7A through 7D) to investigate mediating effects.

Results

Descriptive statistics

Characteristics of the sample are presented in Table 1. The majority are non-Black/non-Hispanic children (67.65%).[9] When they were interviewed in the 9th/10th grade, most children are 15 or 16 years old, about seven out of ten children (68.64%) live in an urban area, and the average family size is about four. The mean score of school quality (25.09 points) indicates that, in general, children are fairly satisfied with school in terms of making friends, teachers, classes, and overall school environment. On average, child cognitive ability is scored at 101.24 (median=102) in PIAT math, 104.56 (median=105) in PIAT reading recognition, and 98.62 (median=99) in PIAT reading comprehension. Mothers of the study sample are mostly married (71.50%), and just over half of the mothers (53.63%) have a high school education, while about 35% either attended some college or had obtained a college degree. Mother's age ranges from 31 to 41, with an average age of 37.

About 91% of children completed their high school education, either graduating from high school or obtaining a GED credential.[10] Over 60% attended either a two-year or four-year college within eight years after 9th/10th grade. In contrast to relatively higher rates of high school completion and college enrollment, only 19.91% report that they completed a college degree by the time they reached 23 to 26 years old. This gap may reflect that college degree attainment is more challenging for various reasons compared to the other two outcomes.

[9] Most children in this category were non-Hispanic White (66.10%).
[10] About 9% are those who passed a GED test.

Table 1. Descriptive Statistics of Variables (weighted) (N=632)

Variables	Mean or %	Median	(Range)
Dependent variables			
High school graduate (%)	90.76		
Ever enrolled in college (%)	61.23		
College degree attainment (%)	19.91		
Independent variables			
Family Income ($)	45,754.78	38,936.84	(0 ~ 731,897.69)
Parental Assets			
Net worth ($)	79,463.43	30,500.00	(-123,626.51 ~ 1,680,524.00)
Financial assets ($)	16,299.48	1,246.65	(0 ~ 348,024.22)
Non-financial assets ($)	98,018.43	60,800.00	(0 ~ 2,230,471.64)
Home ownership (%)	65.90		
Parental Liabilities			
Unsecured debt ($)	4,331.26	0.00	(0 ~ 135,054.17)
Secured debt ($)	46,893.66	24,933.08	(0 ~ 1,163,543.7)
Mediating variables			
Parental involvement in child education	27.91	29.00	(0 ~ 44)
Child's educational expectation (year/grade)	14.95	16.00	(9 ~ 18)
Child's self-esteem	32.47	31.00	(20 ~ 40)
Control variables			
Child's age (year)	15.93	16.00	(15 ~ 18)
Child's gender (1=Female, %)	47.65		
Child's race (%)			
Non-African-American, non Hispanic	67.65		
African-American	20.31		
Hispanic	12.04		
Child's cognitive ability			
PIAT Math	101.25	102.00	(65 ~ 135)
PIAT Reading Recognition	104.56	105.00	(65 ~ 135)
PIAT Reading Comprehension	98.62	99.00	(65 ~ 135)
School quality	25.09	25.00	(13 ~ 32)
Birth order	1.53	1.00	(1 ~ 6)
Family size	4.46	4.00	(2 ~ 11)
Mother's age (year)	36.85	37.00	(31 ~ 41)
Mother's marital status (%)			
Never married	7.55		
Currently married	71.50		
Separated, divorced, or widowed	20.95		
Mother's education (%)			
No high school	11.33		
High school Completion	53.63		
Some college or higher	35.04		
Residence (1=Urban, %)	68.64		

Note: Amounts of income, assets, and liabilities are in 1998 dollars.

The average family income is approximately $45,755 with a median of $38,937, which does not greatly differ from national median household income in 1998, which was $38,885 (U.S. Census Bureau, 1999).[11] Compared to income, net worth is much more skewed in distribution as shown by the average of about $79,463 and the median of $30,500. Homeowners comprise about 65.9% of the sample, which is very similar to the 66.4% national statistic from the SIPP (U.S. Census Bureau, 2003). Wide ranges in skewed distribution are consistently found when parental assets and liabilities are collapsed into financial assets, non-financial assets, unsecured debt, and secured debt. Average gross financial assets are about $16,299 (median=$1,247). Gross non-financial assets, including values of both residential and non-residential properties, vary greatly, with a mean of $98,018 and a median of $60,800. Another noticeable difference between financial assets and non-financial assets is that more households hold gross non-financial assets (92.56%) than gross financial assets (70.67%). Considering that homeowners are over 65% of the sample and the average value of a home is about $64,790 (median $50,000), home value constitutes a large share of non-financial assets. Distributions of liabilities are also skewed. Four out of ten (40.23%) have unsecured debt owed to stores, hospitals, banks, or individual people, and the average amount at about $4,331 (median=$0). Three quarters of the sample (77.34%) have secured debt with higher average amounts (mean=$46,894, median=$24,933), compared to unsecured debt.

The level of parental involvement in child's education is 27.91 points on average (median=29) with a range of 0 to 44, suggesting that children assess their parents as more likely to be "sometimes" involved in their education. The mean of the highest grade or academic year that the child thinks he/she would actually complete is about 15, indicating some post-secondary education after high school graduation. Also, children generally show quite positive self-esteem as shown by a mean score of 32.47 points.

Logistic regression analyses

Economic resources, mediators, and high school completion

Table 2 presents results on effects of parental economic resources on high school completion both before and after controlling for hypothesized mediators. Model 1 indicates analyses without the mediators, and model 2 refers to those with the mediators.

Family income is positively associated with child's high school completion in models 1A and 1B but is insignificant in models 1C and 1D, where specific measures of assets and liabilities are included. Among diverse parental assets, financial assets in model 1C are significantly associated with high school completion (p=0.021). However, the association becomes marginally significant in model 1D, when non-financial assets and secured debt are included instead of home-ownership. In addition, child's cognitive ability in reading recognition, child's birth order, and mother's college education are mostly significant.

[11] The data source is Current Population Survey and the value is converted in 1998 dollars. The median income averaging over three years from 1996 to 1998 is $37,779 in 1998 dollars.

Table 2. Logistic Regression Analyses: Odds Ratio on High School Completion (weighted)

	A		B		C		D	
	Model 1A	Model 2A	Model 1B	Model 2B	Model 1C	Model 2C	Model 1D	Model 2D
Family Income (log)	**2.164****	**2.232****	**2.149****	**2.240****	1.506	1.542	1.366	1.300
Assets								
Net worth (log)			1.037	0.985				
Financial assets (log)					**1.165***	1.139 ϕ	1.134 ϕ	1.087
Non-financial assets (log)							0.939	0.968
Homeownership (1=yes)					0.903	1.039		
Liabilities								
Unsecured debt (log)					1.004	0.999	0.983	0.967
Secured debt (log)							1.117 ϕ	**1.143***
Parental involvement in education		1.004		1.004		1.005		1.011
Child's educational expectations		**1.578*****		**1.579*****		**1.540*****		**1.573*****
Child's self-esteem		0.929		0.929		0.928		0.931
Child's age	1.181	1.538	1.182	1.537	1.190	1.527	1.121	1.436
Child's gender (male)								
Female	1.591	1.601	1.595	1.599	1.416	1.415	1.501	1.549
Child's race (Non-African American, Non-Hispanic)								
African-American	1.283	1.073	1.282	1.074	1.325	1.123	1.333	1.222
Hispanic	0.611	0.561	0.614	0.560	0.610	0.561	0.600	0.608
Child's cognitive ability								
PIA T Math	1.010	1.007	1.010	1.007	1.006	1.005	1.002	1.004
PIAT Reading Recognition	**1.040***	1.039 ϕ	**1.040***	1.039 ϕ	**1.044***	1.043 ϕ	**1.047***	**1.044***
PIAT Reading Comprehension	1.028	1.026	1.028	1.027	1.024	1.022	1.023	1.024
School quality	1.063	1.067	1.063	1.067	1.054	1.055	1.066	1.058
Birth order	**0.496****	**0.530****	**0.496****	**0.530****	**0.516****	**0.547****	**0.513****	**0.516****
Family size	1.214	1.227 ϕ	1.213	1.227 ϕ	1.278 ϕ	1.280 ϕ	1.278 ϕ	1.308ϕ
Mother's age	1.191 ϕ	1.101	1.191 ϕ	1.101	0.189 ϕ	1.095	1.201 ϕ	1.118
Mother's marital status (unmarried)								
Married	0.876	0.792	0.876	0.792	0.846	0.805	0.767	0.701
Mother's education (No high school)								
High school completion	1.843	1.537	1.850	1.534	1.716	1.428	1.413	1.046
Some college	**3.509***	2.507	**3.530***	2.496	3.087 ϕ	2.271	2.512	1.628
Residence (rural)								
Urban	0.652	0.627	0.653	0.626	0.641	0.614	0.723	0.706
N	632	632	632	632	632	632	632	632

Note: Category value in parentheses indicates a reference group, unless indicated otherwise. "Log" in parentheses indicates that the continuous measures are log-transformed. *** p<0.001, ** p<0.01, * p<0.05, ϕ p<0.1

As shown in models 2A through 2D, which include the hypothesized mediators, child's educational expectations are significantly and positively associated with high school completion in a consistent manner, regardless of which types of economic resources are controlled. However, parental involvement in education and child's self-esteem are not significant predictors. After the potential mediators are entered, financial assets become marginally significant in model 2C (p=0.064), compared to model 1C (p=0.021). Secured debt, which is marginally significant in model 1D (p=0.057), becomes significant at the 0.5 level in model 2D (p=0.021), but the relationship itself remains similar in terms of effect size. More importantly, secured debt is positively associated with high school completion, although it is categorized as a liability. This is because most home-owners live with debts on mortgages, and therefore, secured debt tends to reflect a higher level of economic functioning. Of covariates, significant associations with mother's college education and PIAT reading recognition disappear after potential mediators are included.

Overall, no dramatic changes are observed after including the three possible mediators. For instance, family income is still significant in models 2A and 2B, and most assets and liabilities measures stay in similar relationships with high school completion, even though financial assets become less significant.

Economic resources, mediators, and college attendance

Table 3 presents results on parental economic resources and the probability that children ever attended either a two-year or four-year college. Model 3 includes logistic regression models by types of economic resources before including the hypothesized mediators, and model 4 includes the equivalent analyses with the three hypothesized mediators.

Family income is a significant factor in child's college attendance in model 3A (p=0.002) and model 3B (p=0.036) but no longer significant in models 3C and 3D when specific measures of assets and liabilities are controlled. Three types of assets—financial assets, home ownership, and non-financial assets—are only marginally significant: financial assets (p=0.087) in model 3C, home-ownership (p=0.072) in model 3C, and non-financial assets (p=0.064) in model 3D. Despite the marginal significance of assets, it is notable that the addition of assets results in a decrease in the effect of family income. When specific measures of assets and liabilities are included in models 3C and 3D, family income is no longer significant even at a marginal level.

Of child characteristics, child's gender, cognitive abilities measured by PIAT math and PIAT reading comprehension, and rating of school quality are significantly associated with the probability of college attendance in all of the four logistic regression analyses (models 3A through 3D). By and large, female children have a greater probability of attending college. As expected, better school quality and higher levels of cognitive ability in math and reading comprehension are significantly associated with a greater chance of going to college overall. In addition, mother's post-secondary education significantly increases the probability of college attendance.

Table 3. Logistic Regression Analyses: Odds Ratio on College Attendance (weighted)

	A		B		C		D	
	Model 3A	Model 4A	Model 3B	Model 4B	Model 3C	Model 4C	Model 3D	Model 4D
Family Income (log)	**1.781****	**1.742****	**1.548***	1.532 ψ	1.409	1.377	1.296	1.237
Assets								
Net worth (log)			1.635	1.589				
Financial assets (log)					1.063 ψ	1.051	1.052	1.035
Non-financial assets (log)							1.111 ψ	1.121 ψ
Homeownership (1=yes)					1.665 ψ	**1.921***		
Liabilities								
Unsecured debt (log)					1.026	1.026	1.020	1.018
Secured debt (log)							1.008	1.023
Parental involvement in education		0.980		0.984		0.980		0.984
Child's educational expectations		**1.466*****		**1.450*****		**1.481*****		**1.482*****
Child's self-esteem		0.997		1.001		0.995		1.001
Child's age	0.840	0.951	0.889	0.999	0.860	0.981	0.879	1.002
Child's gender (male)								
Female	1.629 ψ	1.536	**1.692***	1.608 ψ	1.597 ψ	1.530	**1.692***	1.652 ψ
Child race (Non-African American, Non-Hispanic)								
African-American	1.375	1.221	1.375	1.219	1.644	1.475	1.770 ψ	1.552 ψ
Hispanic	0.935	0.984	1.069	1.116	1.011	1.089	1.016	1.087
Child's cognitive ability								
PIAT Math	**1.051*****	**1.051*****	**1.049*****	**1.048*****	**1.045*****	**1.044*****	**1.048*****	**1.048*****
PIAT Reading Recognition	0.997	0.993	0.999	0.994	1.000	0.996	0.998	0.993
PIAT Reading Comprehension	**1.029***	1.026 ψ	**1.031***	1.027 ψ	**1.031***	**1.027***	**1.031***	**1.027***
School quality	**1.114****	**1.114****	**1.121****	**1.118****	**1.112****	**1.115****	**1.112****	**1.112****
Birth order	0.807	0.806	0.822	0.816	0.852	0.839	0.829	0.799
Family size	1.075	1.133	1.091	1.148	1.114	1.180	1.134	1.211 ψ
Mother's age	1.126 ψ	1.058	1.119 ψ	1.054	1.114 ψ	1.044	1.125 ψ	1.059
Mother's marital status (unmarried)								
Married	0.788	0.700	0.782	0.691	0.677	0.579 ψ	0.620	0.519 ψ
Mother's education (No high school)								
High school completion	1.576	1.567	1.674	1.637	1.581	1.574	1.463	1.412
Some college	**3.489****	**3.355***	**3.929****	**3.636***	**3.404****	**3.384***	**3.003***	2.815 ψ
Residence (rural)								
Urban	1.096	1.209	1.158	1.269	1.155	1.287	1.155	1.314
N	632	632	632	632	632	632	632	632

Note: Category value in parentheses indicates a reference group, unless indicated otherwise. "Log" in parentheses indicates that the continuous measures are log-transformed. *** p<0.001, ** p<0.01, * p<0.05, ψ p<0.1

In models 4A through 4D, child's higher educational expectations significantly increase the likelihood of college attendance, all else being equal. Similar to the high school completion model, parental involvement in education and child's self-esteem are not significant. When the mediators are entered into the models, homeownership becomes significant (p=0.035) as shown in model 4C, from a marginally significant association in model 3C. Family income becomes insignificant in model 4B. In general, the magnitude of effects by economic resources does not change to a large degree between model 3 and model 4 even after the three potential mediators are included in the models. Likewise, most control variables remain the same; PIAT math, school quality, and mother's college education are still significant, while child's gender and PIAT reading comprehension appear to become less significant.

Economic resources, mediators, and college degree attainment

Table 4 presents results on college degree attainment in model 5 and model 6. Models 5A to 5D show the analyses results on child's college degree attainment before the hypothesized mediators are included. The major difference in findings on college degree attainment, compared to high school completion and college attendance, is that family income is constantly significant across models 5A to 5D, even after parental assets and liabilities are controlled. That is, the probability of college degree attainment significantly increases with a rise in family income. Among parental assets and liabilities, non-financial assets are significantly and positively associated with college degree attainment, as noted in model 5D (p=0.042).

Similar to the results on college attendance, among control variables, child's gender, child's cognitive abilities in math and reading comprehension, mother's education, and school quality are significantly associated with college degree attainment, regardless of what kinds of parental economic resources are controlled. The difference in college degree attainment models are that mother's marital status and mother's high school education are also mostly significant.

Table 4 shows analyses results on college degree attainment, after the hypothesized mediators are included (models 6A through 6D). As found in the other educational attainment models (model 2 and model 4), child's educational expectations are significantly associated with college degree attainment in models 6A to 6D. Furthermore, child's self-esteem consistently shows a significantly positive association with college degree attainment in models 6A through 6D. Even after including mediators, family income and non-financial assets are significantly associated with college degree attainment, although the magnitude of the family income effect decreases to some extent. Also, statistically significant relationships with covariates remain mostly the same.

Table 4. Logistic Regression Analyses: Odds Ratio on College Degree Attainment (weighted)

	A		B		C		D	
	Model 5A	Model 6A	Model 5B	Model 6B	Model 5C	Model 6C	Model 5D	Model 6D
Family Income (log)	**2.692*** **	**2.447*** **	**2.587*** **	**2.302** **	**2.327** **	**2.057** **	**2.378** **	**2.058** **
Assets								
Net worth (log)			1.124	1.219				
Financial assets (log)					1.046	1.051	1.043	1.043
Non-financial assets (log)							**1.169***	**1.210***
Homeownership (1=yes)					1.592	1.860		
Liabilities								
Unsecured debt (log)					1.004	1.005	1.009	1.008
Secured debt (log)							0.931	0.941
Parental involvement in education		0.994		0.994		0.994		0.999
Child's educational expectations		**1.363*** **		**1.362*** **		**1.388*** **		**1.375*** **
Child's self-esteem		**1.095***		**1.098***		**1.098***		**1.105***
Child's age	1.249	1.341	1.262	1.358	1.276	1.371 ϕ	1.281	1.369
Child's gender (male)								
Female	**3.590*** **	**3.642*** **	**3.568*** **	**3.620*** **	**3.605*** **	**3.783*** **	**3.539*** **	**3.765*** **
Child race (Non-African American, Non-Hispanic)								
African-American	1.188	1.016	1.199	1.032	1.369	1.199	1.383	1.189
Hispanic	0.597	0.632	0.620	0.645	0.637	0.665	0.634	0.667
Child's cognitive ability								
PIAT Math	**1.047** **	**1.046** **	**1.046** **	**1.045***	**1.042***	**1.040***	**1.045***	**1.043***
PIAT Reading Recognition	0.981	0.974 ϕ	0.982	0.974 ϕ	0.983	0.974 ϕ	0.982	0.973 ϕ
PIAT Reading Comprehension	**1.030***	**1.029** ϕ	**1.031***	**1.031***	**1.034***	**1.034***	**1.031***	**1.033***
School quality	**0.147***	**1.139***	**1.146***	**1.138***	**1.145***	**1.139***	**1.142***	**1.131***
Birth order	1.233	1.168	1.246	1.194	1.302	1.268	1.265	1.226
Family size	0.848	0.924	0.851	0.923	0.875	0.962	0.886	0.967
Mother's age	1.055	1.047	1.051	1.040	1.039	1.029	1.038	1.028
Mother's marital status (unmarried)								
Married	0.518 ϕ	0.428*	0.513 ϕ	**0.421***	**0.435***	**0.345** **	**0.421***	**0.319** **
Mother's education (No high school)								
High school completion	**4.438***	**4.506***	**4.491***	**4.578***	**4.694***	**4.906***	**4.781***	**4.626***
Some college	**7.458** **	**6.262** **	**7.588** **	**6.405** **	**7.918** **	**6.727** **	**7.864** **	**6.038***
Residence (rural)								
Urban	0.603	0.592	0.616	0.610	0.634	0.641	0.614	0.604
N	632	632	632	632	632	632	632	632

Note: Category value in parentheses indicates a reference group, unless indicated otherwise. "Log" in parentheses indicates that the continuous measures are log-transformed. *** p<0.001, ** p<0.01, * p<0.05, ϕ p<0.1

Mediating effects

Mediation tests find that child's educational expectations mediate the effect of financial assets on high school completion. Financial assets are significantly associated with child's educational expectations (p=0.046),[12] and also significantly associated with high school completion (p=0.021), as previously shown in model 1C, controlling for family income, homeownership, unsecured debt, and other characteristics (see Table 2). When child's educational expectations are included in the equivalent analyses, the association between financial assets and high school completion becomes insignificant at the 0.05 level (see model 2C in Table 2). This result suggests that the effect of financial assets on high school completion works through child's educational expectations.

However, the hypothesized mediating effects by child's educational expectations are not found in the other relationships. Although child's educational expectations are significant factors leading to positive educational attainment from high school completion through college degree attainment (see Tables 1 to 3), economic resources other than net worth and financial assets—such as family income, home ownership, and non-financial assets and liabilities—do not show a significant relationship with child's educational expectations.[13]

Mediating effects by child's self-esteem and parental involvement in child's education are not found. Parental involvement is not significantly associated with child's educational attainment. Child's self-esteem is significantly related to college degree attainment, but parental economic resources are not associated with child's self-esteem.

Robustness tests [14]

The equivalent models are additionally conducted on high school graduation with diploma to check the robustness of the study findings from the main analyses. Family income is no longer significant in any of the corresponding models that included assets and liabilities (sub-models B, C, and D). Net worth, financial assets, home ownership, and secured debt are positively and significantly associated with the probability of successfully graduating from high school with a diploma. Also, child's educational expectations mediate the associations between net worth and receipt of a high school diploma and between financial assets and receipt of a high school diploma. Of covariates, child's gender, PIAT math scores, school quality, birth order, and mother's post-secondary education are constantly important predictors. Overall, while the robustness tests generally indicate consistent results with the main analyses, parental assets and liabilities demonstrate much stronger effects, and mediating roles of child's educational expectations are very clear.

Discussion

Findings indicate that family economic resources, particularly assets, are significantly predictive of every level of educational attainment, though there are some variations across types of educational outcomes as well as economic resources.

[12] Results of OLS regression on parental economic resources and the three hypothesized mediators are not presented here due to space limitations. Full results are available from the first author upon request.
[13] Full results are available from the first author upon request.
[14] Full results are available from the first author upon request.

In the case of high school completion, the income effect on high school completion decreases and becomes insignificant when specific measures of assets and debt are controlled. Instead, the form of financial assets and secured debt—seemingly highly tied to home ownership—are more likely significant predictors. In predicting college attendance, asset effects are apparent in that home ownership is likely significantly associated, while financial assets and non-financial assets are marginally associated. Moreover, once specific assets and liabilities measures are controlled, the significant effect of income disappears, while assets, homeownership, and non-financial assets remain at least marginally significant. This suggests that the asset effects may outweigh the effects of family income, and that, all else equal, children of parents with more assets may have a higher likelihood of going to college, as found in previous research.

In contrast to the high school completion and college attendance models, family income demonstrates a significant relationship with college degree attainment, no matter what types of assets and liabilities are controlled. This finding is consistent with the study by Nam and Huang (2009). Permanent family income may be a good proxy to represent family economic functioning and whether a family can support a child's college career in the long-term. Also, of parental assets and liability measures, non-financial assets are significant in predicting college degree attainment, which is consistent with the evidence from the study by Zhan and Sherraden (2009) using the same data source. Although most families might not be willing to liquidate non-financial assets, the finding is still convincing because families with non-financial assets have a greater ability to borrow money when needed (Cha, Weagley, & Reynolds, 2005; Nam & Huang, 2009; Zhan & Sherraden, 2009), and non-financial assets can be a symbol of higher socio-economic status and economic security.

Child's educational expectations are significantly associated with the three educational milestones in the expected direction and act as a mediator in the relationship between financial assets and high school completion. This result is consistent with the reasoning in the integrative model of educational achievement and the assets for development model. The comprehensive educational achievement model postulates that distal factors (e.g., family SES, parents' values, and prior achievement) predict propensity levels (e.g., child's ability and willingness to learn) and educational opportunities (e.g., school climate, teacher, and courses), and consequently, propensity factors and opportunities result in higher levels of academic achievement (Byrnes & Miller, 2007). Furthermore, assets may foster propensity in children to take advantage of learning opportunities and be more motivated toward better educational outcomes. Therefore, the significant mediating role played by child's educational expectations supports the possibility that children with lower levels of liquid assets may adjust their educational expectations because of family circumstances, and this shift in expectations, in turn, may discourage children from completing high school or pursuing a post-secondary education.

Child's self esteem is significantly associated with college degree attainment, but a mediating effect via child's self-esteem is not supported. This signals that child's self-esteem might be an important and long-term motivational factor in completing a higher educational degree, although it does not necessarily mediate the effect of parental economic resources. The insignificant mediating effect of child's self-esteem is reported by other studies (Orr, 2003; Yeung & Conley 2008), while a large body of research shows that self-esteem may have a positive impact on educational achievement (Liu, Kaplan, & Risser, 1992; Sterbin & Rakow, 1996; Yeung & Conley, 2008).

The finding that parental involvement does have a significant mediating effect is not unanticipated. Other quantitative studies find inconsistent relationships between parental involvement and academic achievement of high school students. Previous research has demonstrated that the effect of parental involvement on educational outcomes can vary by child's age, educational outcome measures, conceptual definition of the construct *parental involvement*, and child's academic ability (Barnard, 2004; Fan & Chen, 2001; Keith 1991; Shumow & Miller, 2001). Another plausible reason for an insignificant effect of parental involvement might be specification of the construct. Parental involvement can be confounded by other parental and child characteristics. To address the complicated nature of parental involvement, future studies should continue to examine the issue with the same measure from on-going longitudinal data in the NLSY79.

The study is not free from limitations. First, this study draws both 9th and 10th graders in either 1996 or 1998. It is possible, however, that the same grade of each cohort can be in a different academic year because the time point of data collection varies in each year by case. Second, unsecured liability is captured in the data only if the debt owed to any stores, doctors, hospitals, banks, or anyone else exceeds $500, and amounts less than $500 are not counted. Third, child's educational outcomes are examined for eight years after the data collection in 9th/10th grade. While the length of eight years is reasonably long to follow the outcomes of high school completion and college attendance, it may be a little short to measure college degree attainment, particularly a four-year Bachelor's degree. This can be resolved as more rounds of data will be available in the near future. Fifth, the study does not fully include all potentially critical factors. Because of limited availability of data, standardized test scores measured at age 10-14 are employed to measure cognitive ability, instead of academic performance in high school. Also, even though coursework-related factors, teacher quality, and other objective measures of school quality are critical "proximal causes" of academic achievement, they are not available to be included. For similar reasons, peer factors and neighborhood indicators cannot be controlled.

Conclusions

The primary goal of this study has been to examine distinct effects of different types of parental economic resources on child's educational attainment, along with potential mediating mechanisms by non-economic characteristics.

In sum, the study findings provide additional empirical evidence on the important role of family resources in educational attainment. Overall, the effect of family income declines and can become non-significant when assets are considered in the same model. Different types of parental economic resources work in a different fashion for each level of educational attainment. Liquid assets and home-ownership appear to be more important for high school completion and college attendance, while stable economic status and more solid types of assets appear to ease the transition into post-secondary education. Also, financial assets affect high school completion through child's educational expectations.

Another important evidence from mediation tests is that the inclusion of the hypothesized mediators (parental involvement, child's educational expectations, and child's self-esteem) does not greatly change the effects of most parental economic resources on educational attainment, with the exception of the effect of financial assets on high school completion, which becomes insignificant.

This suggests that parental economic resources continue to be critical in every stage of child's educational attainment, regardless of potential mediating factors.

The study contributes to current academic knowledge and policy with comprehensive evidence. First, we identify distinctive roles of parental assets—not just income—in accounting for children's educational attainment. It is largely agreed that income measures have limitations for representing parents' economic resources, and consideration of assets provides additional measures that complement traditional approaches. Also, the study adds insightful evidence to asset-based research by investigating different functions of various types of assets and liabilities, not just the total amount of net worth. Second, the study sheds light on what types of parental resources might be more important for a particular level of educational attainment. This is accomplished by following the same sample from high school to young adulthood, and then comparing the relationships. Third, the complex nature of resource and education relationships are further explored by incorporating the mediating mechanisms of parental involvement, child's educational expectations, and child's self-esteem. The study broadens understanding of these mechanisms by examining them in a more comprehensive context, in contrast to studies that examine economic resources and non-economic factors separately in each research field.

Evidence from this study suggests that parental assets are important resources for children's educational attainment relative to family income, and that this relationship does not change greatly after controlling for non-economic characteristics of parents and children. For applied policy purposes, these results have clear meaning. New policy interventions should be considered for low- and moderate-income families who have limited opportunity to accumulate assets but are concerned about education of their offspring.

Child Development Accounts (CDAs) are an emerging research and policy initiative to encourage families to plan ahead and invest in a savings account specifically for their child's future post-secondary education (Mason et al., 2010; Sherraden & Clancy, 2008; Williams Shanks, Kim, Loke, & Mesmin, 2010). CDAs have been tested in the United Kingdom, Canada, South Korea, and Singapore (Loke & Sherraden, 2009), and a large-scale experiment in the United States—SEED for Oklahoma Kids (SEED OK)—examines how a universal CDA model promotes savings for children's education and may influence educational expectations and parenting practices (Kim & Nam, 2009; Sherraden, & Stevens, 2010; Zager et al., forthcoming). Without such innovative interventions to meet their specific needs, children's futures will be jeopardized. Much more research and policy should pay attention to asset-building work to help children of low- and moderate-income families develop their potential and minimize social risks.

Overall, basic research, such as the current study, combined with applied research, such as that being conducted on SEED OK, represent a growing body of policy-relevant asset-based scholarship. Evidence from this research and policy is emerging, though many questions are yet to be answered and much more remains to be done. Research and policy innovation are underway, and will continue in the years ahead.

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