Math achievement and children’s savings: Implications for Child Development Accounts

Synopsis

The No Child Left Behind Act of 2001, commonly known as NCLB, mandated that every child should be performing at or above grade level by the school year 2013–2014 in U.S. elementary and secondary schools. The legislation places particular emphasis on raising achievement among minority and low-income students. However, it is common knowledge that black and low-income students continue to underperform in reading and math when compared to their white and higher income counterparts. New and novel solutions to this problem may be needed. One such approach receiving increasing attention by policy makers and researchers alike can be found in the asset field. Asset researchers suggest that policies that seek to build wealth may lead to improved academic performance among minority and low-income students.

Continuing this line of research, a newly published paper by William Elliott, Hyunzee Jung, and Terri Friedline from the University of Pittsburgh’s School of Social Work, titled Math Achievement and Children’s Savings: Implications for Child Development Accounts in the Journal of Family and Economic Issues examines whether children (ages 12 to 18) who have a savings account in their own name may be more likely to have higher math scores than children without a savings account. They suggest that children who have a savings account may gain practical experience in solving economic problems which may in turn translate into higher math scores. Further, in comparison to household level wealth variables they suggest that savings in a child’s name may have especially powerful effects on their math achievement.

To test whether household or children’s savings has a stronger or more direct association with children’s math achievement, this study examines children’s math achievement as a factor of variables at the household level and the child’s level using multilevel modeling (HLM). The child level predictor in this study is whether children have a savings account in their name. A number of child level covariates are included in the model to include race, gender, math efficacy, self-concept, children’s and parents’ educational expectations and whether children were ever in special education. The household level predictors are the household’s net worth and whether they own a home. Family income, head’s educational level, and marital status are household level covariates.

They find that children’s savings accounts are positively associated with math scores. Children with savings accounts on average score almost 9% higher in math than children without a savings account. Further, results suggest that children’s savings accounts fully mediate the relationship between household wealth and children’s math scores. Household net worth is related to children’s math scores when children’s savings is not included in the model but when children’s savings is included net worth is no longer statistically related. That is, having a savings account carries the full effect of household wealth onto children’s math achievement. However, household wealth moderates the mediating relationship. That is, higher levels of household wealth amplify the association between having savings of their own and their math achievement. As a result, math scores of low-wealth children increase less than those of middle-wealth and high-wealth children’s. Specifically, low-wealth children’s math scores increase by 2.13, middle-wealth children’s increase by 4.36, while high-wealth children’s increase by 6.59 points. It appears that household wealth acts as a contextual variable. That is, it may be children
understand the benefits of having savings in their own name within the context of household wealth. More research is needed.

Despite the possible alternative explanations, the findings lend support to policies, such as the America Saving for Personal Investment, Retirement, and Education Act (ASPIRE), that attempt to build children’s wealth. Findings also suggest that while having savings benefits all children, children who live in higher-wealth households are likely to benefit more. As a result, it is suggested here that it may be necessary to incorporate progressive measures (e.g., higher match for children in lower-wealth families) into such policies if the goal is to help level the playing field. Additionally, if confirmed in future studies, findings suggest that savings in a child’s name may have especially powerful effects on their math achievement.

Reference:


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