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Material hardship and 529 college savings plan participation: The mitigating effects of Child Development Accounts

Nora Wikoff [a,*], Jin Huang [b], Youngmi Kim [c], Michael Sherraden [a]

[a] Center for Social Development, Brown School of Social Work, Washington University in St. Louis, Campus Box 1196, One Brookings Drive, St. Louis, MO 63130, United States
[b] School of Social Work, College for Public Health and Social Justice, Saint Louis University, 211 Tegeler Hall, 3550 Lindell Boulevard, St. Louis, MO 63103, United States
[c] School of Social Work, Virginia Commonwealth University, 1000 Floyd Avenue, P.O. Box 842027, Richmond, VA 23284-2027, United States

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ABSTRACT

Experience of material hardship can adversely affect a family's ability to make long-term investments in children's development. We examine whether material hardship is associated with one indicator of such investments: participation in a tax-advantaged college savings plan (529 plan). Data for this study come from the SEED for Oklahoma Kids (SEED OK) experiment, an intervention that offers Child Development Accounts with financial incentives to encourage the accumulation of college savings for children from the time of their birth. Results show that material hardship is negatively associated with 529-plan participation, and this association varies by treatment status. At all levels of material hardship, treatment-group mothers are more likely to hold accounts than control-group mothers. These findings suggest that CDAs can be a useful policy tool to support families' financial preparation for college.

1. Introduction

Rising costs of higher education in the United States have not diminished parents' expectations for children's academic achievement: nearly all families believe that their children will attend college, and most parents want to help them pay for it (Sallie Mae and Ipsos, 2013; Taylor et al., 2011). Unfortunately, many families lack a clear sense of how they will achieve this goal. Surveys show that parents often overestimate the availability of grants and scholarships and underestimate the total costs of attendance (Sallie Mae and Ipsos, 2013; Taylor et al., 2011). As tuition and fees continue to increase, saving becomes an increasingly important strategy in attempts by American families to finance higher education (Sallie Mae and Gallup, 2010; Sallie Mae and Ipsos, 2012).

To facilitate families' efforts to save for college, the federal government created tax-advantaged college savings plans in 1996 (often called 529 plans; Clancy, 2003; US Department of the Treasury, 2009). Earnings from 529-plan contributions are not subject to federal taxes while they remain invested in the accounts, and since 2001, distributions used for qualifying higher education expenses have been exempt from federal taxes (Government Accountability Office [GAO], 2012). In

Abbreviations: CDA, Child Development Account; GAO, Government Accountability Office; OK 529, Oklahoma 529 college savings plan; SEED OK, SEED for Oklahoma Kids.

* Corresponding author. Tel.: +1 314 703 8731.
E-mail addresses: nwikoff@go.wustl.edu (N. Wikoff), jhuang5@slu.edu (J. Huang), ykim@vcu.edu (Y. Kim), sherrad@wustl.edu (M. Sherraden).

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addition, many state plans allow annual state tax deductions for qualified contributions (Clancy, 2001; GAO, 2012; US Department of the Treasury, 2009).

Opening a savings account is the first step many parents take toward saving for their child's college. So too, a 529 account is often the initial point of participation in college savings plans. Participation thus serves as an important indicator of families' financial preparation for their children's education and long-term development. Despite the tax benefits of these accounts, they are held by fewer than 10% of families that expect to incur education expenses in the next decade (GAO, 2012). Participation rates are even lower among low-income and low-asset families. Median income among families that hold a 529 account is three times greater than that among families not participating in 529 plans, and the median value of assets held by families with 529 accounts may be as much as 25 times that of families without such accounts (GAO, 2012). On average, low-income families that enroll in the plans save less money than do their higher-income counterparts (US Department of the Treasury, 2009).

Empirical evidence shows that household saving for education is positively associated with children's college expectations and long-term educational outcomes (An, 2010; Charles et al., 2007; Elliott, 2009; Elliott and Beverly, 2011). Low income and limited assets curb families' ability to invest in college savings plans for their children (GAO, 2012; Sallie Mae and Ipsos, 2013). Over time, financial barriers to college attendance may impede children's academic preparation for college and diminish their long-term wage prospects (Charles et al., 2007; Elliott et al., 2011a,b; Hill and Duncan, 1987). Therefore, it is important to understand how to help families, especially those facing economic constraints, to prepare financially for their children's college education.

Research on 529 plans and families' financial preparation for college expenses has focused on traditional income-based measures of family economic resources (GAO, 2012; US Department of the Treasury, 2009). This study takes a different perspective: it examines the relationship between material hardship, essentially defined as families' inability to meet basic needs (Heflin et al., 2009), and participation in a 529 plan. Material hardship has been operationalized as food insecurity, housing hardship, energy hardship, difficulty paying utility bills, and unmet medical needs (Ashiabi and O'Neal, 2007; Beverly, 2001; Cancian and Meyer, 2004; Wu and Eamon, 2010). It provides a way to measure economic well-being directly, especially well-being among low-income families (Beverly, 2001; Ouellette et al., 2004). Hardship measures may identify the most disadvantaged households more effectively than income-based poverty measures do (Meyer and Sullivan, 2012).

Families that lack sufficient funds for food, housing, and other daily expenses may not perceive that they can afford to divert funds toward long-term savings goals (Xiao and Noring, 1994), so it is reasonable to presume that experience of material hardship will inhibit 529-plan participation in the same manner that low income and low assets do. Nonetheless, the hypothesized negative association between hardship experience and 529-plan participation merits closer empirical examination (Mayer and Jencks, 1989; Sullivan et al., 2008).

First, it merits scrutiny because studies have not examined whether measures of material hardship or income-based measures better differentiate the economic situations of 529-plan account holders from the situations of those who do not hold such accounts (Headey, 2008). Material hardship is subject to less measurement error than are income-based poverty measures (Beverly, 2001; Heflin et al., 2009; Meyer and Sullivan, 2012; Ouellette et al., 2004), and material hardship measures are often only moderately correlated with income (Mayer and Jencks, 1989; Sullivan et al., 2008). Thus, research suggests that material hardship captures family economic status better than does household income alone. Moreover, including material hardship with income-based measures can provide greater insights into the relationship between family economic situations and financial preparation for college.

Second, the association between material hardship experience and 529-plan participation deserves further scrutiny because the literature demonstrates that material hardship is associated with adverse academic, behavioral, health, and social outcomes for children; these associations persist if analyses control for household income (Chilton et al., 2009; Cook et al., 2008; Gundersen and Kreider, 2009; Huang et al., 2010; Kirkpatrick et al., 2010; Paat, 2011; Raver et al., 2007; Scaramella et al., 2008). Experience of material hardship negatively influences child development through its effects on the home environment, parental investment, and parenting practices (Gershoff et al., 2007; McConnell et al., 2011).

Numerous antipoverty programs, including the Supplemental Nutrition Assistance Program, the National School Lunch Program, and Low Income Home Energy Assistance Program, seek to protect children from the deleterious effects of material hardship by addressing families' immediate consumption needs, but few programs help vulnerable and disadvantaged families to make long-term financial investments for their children (e.g., by saving for postsecondary education). Such investments are important because, as we note above, research finds that they are beneficially associated with educational efforts, expectations, and outcomes (Charles et al., 2007; Elliott, 2009; Elliott and Beverly, 2011). In addition, the lack of institutional and policy support for such long-term investments by low-income families may deter these families from investing in 529 plans early in a child's life (Gray et al., 2012). Material hardship's potentially negative impact on families' college saving may impede children's academic achievement over time and increase the risk of poverty over generations.

To our knowledge, no study examines the relationship between material hardship and 529-plan participation, which here serves as an indicator of financial preparation for a child's college education. Thus, we investigate whether a Child Development Account (CDA) intervention alters the relationship between material hardship and one long-term investment in a child's future: 529-plan participation. The study uses data from SEED for Oklahoma Kids (SEED OK), a social experiment offering CDAs to encourage families to begin saving at a child's birth for his or her college education. The SEED OK experiment supplements the existing tax benefits of 529 plans with progressive financial incentives that aim to increase program access. The experiment also provides participants with informational materials on 529 plans. These features, which are not