

Contents lists available at ScienceDirect

## Children and Youth Services Review

journal homepage: www.elsevier.com/locate/childyouth

# Communication matters: A long-term follow-up study of child savings account program participation



CHILDREN and YOUTH

SERVICES

888

### Anne Blumenthal\*, Trina R. Shanks

University of Michigan School of Social Work, 1080 South University St., Ann Arbor, MI 48104, United States

#### ARTICLE INFO ABSTRACT Keywords: As they are a long-term policy instrument, the results of many child savings account (CSA) programs take Child savings accounts decades to realize. Because of this, important questions regarding the long-term impacts of the programs, as well Higher education as participants' perceptions regarding the programs' long-term impacts, are unanswered. In this study, we pre-Transition to adulthood sent findings from a qualitatively driven complex mixed methods follow-up of the first large CSA demonstration Family communication project, the quasi-experimental Michigan Saving for Education, Entrepreneurship, and Downpayment (SEED) Mixed methods program. We asked SEED account-holding and non-account-holding families how they communicated about college, saving for college, and future educational attainment, nearly ten years after the CSA demonstration project ended. In a novel approach, we conducted separate semi-structured interviews with dyads of parents and children, combining that information with survey data and account balance monitoring data, ultimately gaining a multidimensional picture of how families with and without SEED accounts were approaching planning for post-secondary education right before the transition to adulthood. We found that: (1) the vast majority of account-holding families did not make withdrawals from their SEED accounts, (2) recent family communication about the SEED accounts was related to the specificity of a child's post-secondary plans, (3) there were tensions between college aspirations and the concrete steps needed to get there, and (4) families voiced concerns regarding the substantial barriers to post-secondary education. These findings point to both the promises and

challenges of CSAs that newly developed programs might want to consider.

#### 1. Introduction

Child savings accounts, or CSAs, have been implemented in a growing number of jurisdictions across the world. First described by Sherraden in 1991, CSAs aim to increase the financial security, build the financial capability, and improve the educational outcomes of low-income children and their families. Though there is no national CSA program in the United States, CSA programs have rapidly expanded since their introduction in 2003. In 2017, more than 382,000 American children participated in a CSA program, an expansion of 22% over the previous year (Markoff, Copeland, & Quezada, 2018). As they are a long-term policy instrument, the final results of most CSA programs are decades away.

Prior research has shown positive impacts of CSAs on parental educational expectations, child socio-emotional development, and maternal mental health (Huang, Kim, Sherraden, & Clancy, 2017; Huang, Sherraden, Kim, & Clancy, 2014; Rauscher, Elliott, O'Brien, Callahan, & Steensma, 2017). However, these studies, and others like them, are typically limited to examining the effect of CSAs only a few short years

after families have enrolled in a program. It follows that questions regarding the long-term impacts of the programs, including participants' long-term perceptions regarding the program, are unanswered (Elliott & Harrington, 2016). In this study, we present follow-up data from one of the earliest CSA demonstration projects, the quasi-experimental Michigan SEED (MI-SEED) program. MI-SEED is the only long-term follow-up CSA study, with data first collected in 2004 when youth participants were enrolled in preschool, then again in 2008/2009 when youth participants had started grade school, and, most recently, in 2014/2015 as they entered high school.

In order to understand how the target population for CSAs might reap long-term benefits from CSA programs, we asked SEED accountholding and non-account-holding families how they communicated about college, saving for college, and future educational attainment, nearly ten years after the MI-SEED demonstration project ended. In a novel qualitatively driven complex mixed methods approach, we conducted separate semi-structured interviews with dyads of parents and children. Then we combined that information with survey data collected at the time of the semi-structured interviews, point-in-time

\* Corresponding author. E-mail addresses: anneblue@umich.edu (A. Blumenthal), trwilli@umich.edu (T.R. Shanks).

https://doi.org/10.1016/j.childyouth.2019.02.016

Received 17 October 2018; Received in revised form 7 February 2019; Accepted 7 February 2019 Available online 28 February 2019 0190-7409/ © 2019 Published by Elsevier Ltd. account balance monitoring data, as well as survey data from the MI-SEED impact assessment baseline and Wave 2 surveys, ultimately gaining a multidimensional picture of how families with and without child savings accounts were approaching planning for post-secondary education. In collecting that multidimensional data, we were interested in a set of research questions: How do families communicate about college and saving for college? Do families with child savings accounts use and communicate about accounts? Does that communication (or lack thereof) relate to how children perceive their futures? In this paper, we describe the rich and nuanced ways that caregivers and young people think and communicate about the accounts and their future educational attainment just prior to the transition to adulthood. Our findings offer insights into what is possible with CSA accounts and what issues newly emerging programs might want to consider.

#### 2. Background

#### 2.1. Education and social mobility

Despite unprecedented educational expansion and the rising returns to education, sociodemographic groups have not gained educational credentials equitably. Although some gaps in high school completion rates between students of color and White students narrowed between 1990 and 2013, Black and Hispanic students continued to have lower high school completion rates than White students in 2013 (Musu-Gillette et al., 2016). The gaps persist at the college level, where 42% of White 18- to 24-year-olds enrolled in college compared to 34% of their Black peers in 2013, similar to rates in 2003 (Musu-Gillette et al., 2016).

Similar to how racial gaps in educational attainment have remained stable over time, income-related gaps in education attainment have not narrowed, either (Cahalan, Perna, Yamashita, Ruiz, & Franklin, 2016; Hout, Raftery, & Bell, 1993). Troublingly, researchers have found the opposite: the educational attainment advantages conferred to those in the upper part of the income distribution appear to be increasing over time. Bailey and Dynarski (2011) tracked college entry, persistence, and completion for cohorts born between 1961 and 1964 and between 1979 and 1982 using the National Longitudinal Study of Youth (NLSY) and found that the educational attainment advantages afforded to higher income students were significantly larger for the later cohort. For example, individuals in the top two income quartiles increased their college entry rates by about 22 percentage points, while for individuals in the bottom income quartile, the college entry rate rose just 10 percentage points between cohorts (Bailey & Dynarski, 2011). Using a different dataset, Ziol-Guest and Lee (2016) confirmed that the graduation gap between students with high- and low-income parents was growing over time. Pfeffer (2017) also documented a growing inequality in educational attainment among high- and low-wealth students. He compared levels of educational attainment to parental wealth among cohorts of students born in 1970-1979 to those born in 1980-1989. The trends in educational attainment gaps by parental wealth that he found were starker than those others have found based on income; in fact, there was a "surge in the college attainment of college-going children from the top wealth quintile" (Pfeffer, 2017, p. 20).

Although studies like these seem to show that those in the upper part of the wealth and income distribution are "hoarding" opportunities (see Reeves, 2017), there are many reasons to think that educational attainment is related to upward social mobility. There is ample evidence that a college degree may promote social mobility through increased earnings. The rate of return of a college education<sup>1</sup> ranges from 5.5 to 16.4% (Abel & Deitz, 2014; Barrow & Malamud, 2015), and those rates of return may be greatest for individuals who come from the least advantaged backgrounds (Brand & Xie, 2010). Scholars have also found that a bachelor's degree is significantly and positively associated with higher intergenerational mobility, compared to no degree (Hout, 1984; Torche, 2011). Importantly, this work has found that for those who achieve a bachelor's degree, the probability of their future economic success does not depend on the socioeconomic standing of the family in which they grew up (Torche, 2011). New work has confirmed the finding that students growing up in low-income and high-income families have similar earnings after attaining a bachelor's degree (Chetty, Friedman, Saez, Turner, & Yagan, 2017). However, Chetty et al. (2017) also found that the earnings parity between low-income and high-income students post-bachelor's degree is conditional on the college that students attend, many of which are not accessed by low-income students. Thus, although a bachelor's degree can be powerful in terms of improving economic outcomes, many disadvantaged students do not access higher education or the kinds of higher educational institutions that eliminate earnings inequalities.

#### 2.2. What are CSAs?

CSAs represent one promising approach to promoting educational attainment among disadvantaged students through support for financial security and long-term planning. Universal lifelong asset development accounts were first proposed by Sherraden (1991, 1988), whose original vision was that the accounts would begin at birth and be both universal and progressive, with greater assistance for lower-income individuals. In the United States, the policy conversation about universal CSAs developed with the introduction of state-administered taxexempt 529 savings plans in 1996 and the Saving for Education, Entrepreneurship, and Downpayment (SEED) program implemented in 2003. Currently in the United States, CSAs are typically held in either 529 education savings plans or custodial savings accounts through banks or credit unions. A 529 education savings plan is a tax-advantaged investment plan, administered by a state, where savings (up to a predefined amount) can grow tax-free and qualified education expense withdrawals remain tax free. Unlike a regular savings account, 529 accounts are typically invested in funds, like mutual funds, that fluctuate with financial markets (Clancy, Sherraden, & Beverly, 2015). Most 529s offer age-based investment options with varied risk-based investments.

Structured CSA programs, like SEED, are differentiated from typical (unstructured) college savings accounts or savings accounts in a child's name by three identifying features (Prosperity Now, 2018). First, there is an incentive structure to help encourage families to save and to grow savings amounts. This incentive structure can take the form of matches for each dollar saved, or an initial deposit when the account is opened, for example. The second feature of CSAs is that they restrict how the money in the account can be used. The savings must be explicitly designated for post-secondary education or developing another allowable asset (a business or buying a house). Finally, the incentive funds are only allowed to pay for the allowable asset. Like other structured 529 accounts, the funds in MI-SEED were restricted in this way, however account holders could make non-qualified withdrawals of the funds in their accounts, possibly incurring tax penalties.

The 54 CSA programs running in 32 states and Washington D.C. at the end of 2017 served 382,000 children (Markoff et al., 2018). Aside from providing financial incentives and account structures, many CSA programs also include financial education, materials, and activities for students and families (Elliott, 2018). Though data is not available regarding the average age of CSA programs, many of the programs are

<sup>&</sup>lt;sup>1</sup> The rate of return of a college degree is typically calculated as average annual earnings of a college graduate minus the cost of attendance and the average annual earnings of a high school graduate. The average rate of return of

<sup>(</sup>footnote continued)

a college degree far outpaces other investments such as housing or bonds.

new, with 10 CSA programs starting between 2016 and 2017 alone (Prosperity Now, 2017, 2018). Given the "newness" of the field of CSAs, long-term outcomes for participating children are generally unavailable (Elliott & Harrington, 2016).

#### 2.3. Connecting CSAs to child outcomes

#### 2.3.1. Theory

Scholars have theorized the direct and indirect effects of assets on child development in a variety of ways. Theoretically, assets affect child well-being by protecting against economic shocks. Without a sufficient cushion to buffer against a sudden income or asset loss, families might be subjected to a series of negative events (Grinstein-Weiss, Shanks, & Beverly, 2014). Those events, such as residential displacement, have the potential to negatively impact child development. In addition, assets directly impact the level of resource and time investment parents can make in their children. Assets might also indirectly impact child development by mediating family stress (Rothwell & Han, 2010; Williams Shanks & Robinson, 2013). Without a solid buffer against economic shocks, or with constant economic stress due to low savings, familial contexts can deteriorate, and family stress levels may rise. Thus, assets may directly buffer against the negative effects of economic stress, such as marital conflict, low marital warmth, and low parental nurturing (Grinstein-Weiss et al., 2014).

Undoubtedly, family income impacts the resources available to children, but scholars have theorized that wealth (i.e. assets) may be a better indicator of the long-term investments parents make in their children (Sherraden, 1991; Williams Shanks, 2007). For example, a family might invest in activities for their children with greater frequency if they live in a home that is paid for, if they do not have to worry about paying off significant debts, or if they have investment income on which they can rely. Parents with higher levels of wealth might think differently about their children's futures than those without wealth, as they may be able to view investments in their children from a perspective oriented toward the future (Williams Shanks, 2007).

Importantly, assets have been theorized to change attitudes and expectations that children have for themselves. This idea, that children's educational expectations are shifted through the combination of parental educational expectations and a child's connection to a future college-going self, draws from both empirical evidence and Identity Based Motivation (IBM) theory. Parental educational expectations can be powerful predictors of the educational attainment of their children. Expectations appear to be connected to the socioeconomic status and savings behavior of parents. Evidence shows that socioeconomic circumstances of the family are indirectly related to children's academic achievement, mediated by parental beliefs and expectations (Davis-Kean, 2005; Elliott, 2009). Parents who save for higher education for their children may be more likely to expect that their children attend and complete post-secondary education (Elliott & Sherraden, 2013). This combination of parental expectation and facilitation of savings may trickle down to children's individual expectations and behaviors around education. Children who have savings accounts and expect to graduate with a bachelor's degree are more likely to attend college than their peers who do not have these expectations (Elliott, Chowa, & Loke, 2011).

Additionally, children's expectations for themselves, or their identities, may change in reaction to the future possibilities offered to them through parental asset holding or to their own asset accumulation. A child whose parents save for their higher education in the present may begin to be connect their current identity, actions, and choices to their future self. This idea is a restatement of the main premise of IBM theory, which posits that people use their various identities to motivate their actions and to understand their experiences (Oyserman & Destin, 2010). IBM theory predicts that assets and family resources are likely to impact children's school-focused goals, such as educational expectations, through three identity-based pathways. Children's school focused goals become more focused on future educational attainment: (1) when school feels relevant and congruent with a child's social identity, (2) when a child feels able to accomplish relevant behavioral tasks (like studying), and (3) when a child can interpret difficulty in a productive/ important way (Destin & Oyserman, 2009; Oyserman, 2013, 2015). When a parent saves for a child's post-secondary education, the message to the child may be that "students like them" can and do attend college. This message from parents may translate to a sense that college-going is congruent with a child's identity. In general, identity-congruent behaviors are preferred to identity-incongruent behaviors (Oyserman & Destin, 2010). Thus, if a parent encourages college-going as an identitycongruent behavior, assuming that people tend to act in identity-congruent ways, a child may be more likely to attend college as a way to enact choices congruent their identity.

#### 2.3.2. CSAs and child outcomes

There is a growing body of work finding that assets have an independent, positive effect on children, particularly the educational outcomes of children (see reviews by Elliott & Sherraden, 2013; Grinstein-Weiss et al., 2014), but perhaps the most relevant and compelling evidence of an "asset effect" comes from a randomized control trial of a statewide CSA program, SEED OK. Through random selection of the birth records of all infants born in Oklahoma in 2007 and then random assignment of those children to treatment or control groups, the SEED OK experiment aimed to rigorously test the effect of CSAs on children and families. Treatment group children had a 529 college savings account automatically opened in their name with an initial deposit of \$1000 (Beverly, Clancy, Huang, & Sherraden, 2015). Lowincome children assigned to the CSA program were eligible to receive additional matches for each dollar saved, for a limited period of time (Marks, Engelhardt, Rhodes, & Wallace, 2014). Subsequent analysis of the program found that children who were in the treatment group scored significantly higher on a measure of social-emotional development compared to children in the treatment group, and importantly, that these effects were significantly higher for low-income children (Huang, Sherraden, Kim, & Clancy, 2014). Additionally, the SEED OK treatment has been shown to be related to lower maternal depressive symptoms and to eliminate the social-emotional score gap between children living in unmarried mother households and married mother households (Huang et al., 2017; Huang, Sherraden, & Purnell, 2014).

The exact mechanisms of the effect CSAs on child outcomes is empirically unclear. Active saving in the account may be tied to a sense of future orientation and cognition related to planning for children; however, some research points to the conclusion that CSA holding in and of itself, regardless of the amount saved, may matter to child outcomes. By simply having an account in their own name, a child experiences greater educational expectations and attainment (Elliott & Beverly, 2011). Additionally, in a longitudinal cluster-randomized experiment of CSAs in Uganda, Karimli and Ssewamala (2015) found that participation in a CSA program positively impacted adolescent psychosocial outcomes (reduced hopelessness, enhanced self-concept, and improved confidence about educational plans), regardless of the program's impact on reported savings.

#### 2.4. Current study

Though prior research has shown positive impacts of CSAs on parental educational expectations, child socio-emotional development, and maternal mental health (Huang et al., 2017; Huang, Sherraden, Kim, & Clancy, 2014; Rauscher et al., 2017), these studies, and others like them, are limited to examining the effect of CSAs only a few short years after families have enrolled in a program. For example, the oldest child participants in the SEED OK experiment are currently around 12 years old. Data on long-term program impacts don't yet exist, and questions regarding participants' long-term perceptions of programs remain unanswered (Elliott & Harrington, 2016). In addition, SEED OK is a "low touch" intervention, being an opt-out program with all outreach from the program to participants occurring through the mail (Beverly et al., 2015). Other CSA programs are "higher" touch, with full-time staff devoted to case management and offering financial education classes and other services to parents who opted into the program. There is substantial variation among current CSA programs in terms of program outreach and method of enrollment (opt-in or opt-out; Markoff et al., 2018). In light of these lingering questions, this paper examines how child and parent participants in a "higher" touch CSA were impacted by the program nearly ten years after it began and just prior to the transition to adulthood.

#### 3. Research design

#### 3.1. The Michigan SEED (MI-SEED) intervention

The Michigan SEED (MI-SEED) program took place at a local community action agency targeting low-income families with a child enrolled in agency-affiliated Head Start programs in fall 2004 or fall 2005. The MI-SEED program was designed as a quasi-experiment, with seven "treatment" Head Start centers selected and seven matched "control" Head Start centers selected for inclusion in the study. These Head Start centers were matched according to poverty rates, racial/ethnic composition, and other relevant demographic characteristics. Families with children enrolled at treatment Head Start centers were encouraged to enroll in the SEED program, while families with children enrolled at control centers were not eligible for the program.

The MI-SEED<sup>2</sup> program elements consisted of a Michigan 529 education savings plan account (administered by the Michigan Education Savings Program and managed by TIAA-CREF, now TIAA), financial education, and staff support. MI-SEED provided an initial grant of \$800 to open the child's account. A \$200 state matching grant was offered to qualified residents from the state of Michigan (i.e., resident households with income less than \$80,000). Additional deposits into the account (from parents or other individuals) were matched 1:1 by the SEED program (up to a maximum of \$1200) through December of 2008. Thus, the total amount of incentivized funds a family could have in its account was \$2200, which would lead to maximum of \$3400 including family deposits.

Our study was part of a multistage, multi-method follow-up of the MI-SEED participants. At the start of MI-SEED, a baseline survey of parents at the 14 Head Start centers was conducted by RTI International in the fall of 2004 (n = 790). Of the 790 parent respondents, 381 had focal children enrolled at treatment Head Start centers, and 409 had children at control centers. Not all parents enrolled at treatment centers chose to open accounts; 62% decided to enroll and 38% did not enroll, leaving 235 treatment site parents with accounts and 146 treatment site parents without accounts. Parents who opened accounts were eligible to receive a match for any of their children enrolled in treatment Head Start centers. Several parents took advantage of this option and enrolled multiple children.

Although the Head Start Director was engaged from the beginning of the MI-SEED program and it was hoped that programming would be done primarily by Head Start teachers, they were typically overburdened with other responsibilities (particularly considering the time intensive tasks of getting consent forms signed and enrolling parents in the CSA program). In the end, SEED program staff was hired and assigned to each Center. These SEED coordinators built relationships with parents and Head Start staff, conducted home visits, generated quarterly newsletters, sent reminders, connected parents to other community resources, and led financial education sessions. Head Start staff was kept informed via annual staff meetings and most were supportive of MI-SEED, but the SEED coordinators became the face of the program. Relationships with the coordinators were maintained even as participants left Head Start to enter primary school.

A Wave 2 survey was conducted by RTI in 2008 with the original baseline respondents, and 696 of the 790 in the original sample responded. Parallel to the survey data collection, quarterly account monitoring data were collected by the Center for Social Development from fall 2004 through winter 2008.

MI-SEED was the first large-scale study of the impacts of savings accounts for young children. It had a smaller sample size than SEED OK, yet still yielded a significant "asset effect" when the program was evaluated in 2008. MI-SEED account-holding parents scored significantly higher on two attitudinal measures, including measures of parental satisfaction and a measure of the importance that parents attach to higher education, compared to those who did not have accounts (Marks, Rhodes, Engelhardt, Scheffler, & Wallace, 2009).

#### 3.2. Recruitment of qualitative follow-up sample

By 2013, the last communication that SEED researchers had with most of the intervention sample was in 2008.<sup>3</sup> After the worst economic recession since the Great Depression (2007-2009), we began recruitment efforts for our follow-up study using the last known addresses of the respondents. A total of three mailings were sent out to recruit subjects to participate in the qualitative study. The first mailing was sent out to participants of the SEED Wave 2 survey in March of 2013. We then retrieved accurate mailing addresses for non-respondents by matching their last known address to a current address through LexisNexis. We sent two more recruitment mailings in 2014. From these three mailings and subsequent recruitment efforts, we yielded a final sample of 50 parents interested in participating in a semi-structured interview. Because one of our goals was to ask in general about how families with children close to graduating high school communicated about college and saving for college, we recruited participants from both the original treatment and control groups. As a consequence, 32 parents we recruited were from the treatment group and 18 were from the control group. When possible, we interviewed children of these 50 parents, as well, with a total of 29 youth interviewed from 25 families (24 with accounts from the treatment group, two without accounts from the treatment group, and three from the control group). In total, in the larger study, we interviewed 79 people, 50 adults and 29 children. All treatment group youth interviewed had SEED accounts in their name. Additionally, in collaboration with the Michigan Education Savings Program, we obtained aggregate data on all MI-SEED 529 accounts from TIAA in December 2015.4

#### 4. Methodology

The study was approved by the Health Sciences and Behavioral Sciences Institutional Review Board (IRB-HSBS) at the University of Michigan. Written informed consent was obtained for all participants and data confidentiality was maintained through secured servers, restricted access, and encryption. In order to protect the identities of study participants pseudonyms were used for all participants and identifying details were omitted in any publicly presented materials.

We employed a qualitatively driven complex mixed methods design for this study (Morse, 2017; Morse & Cheek, 2014). In other words, this was a qualitative project at its core, complemented by a small additional quantitative follow-up survey and the 2015 account monitoring

 $<sup>^3</sup>$  One member of the MI-SEED program staff remained employed at the community action agency and communicated with some parents between 2008 and 2013.

<sup>&</sup>lt;sup>2</sup> For detailed information about the original MI-SEED intervention and evaluation design see (Marks et al., 2009) and (Marks & Rhodes, 2009).

<sup>&</sup>lt;sup>4</sup>We were not able to obtain specific information on all withdrawals and deposits for each account.

data. Over 10 years after the MI-SEED impact study began, we sat down with participants to explore the following research questions: How do families communicate about college and saving for college? Do families with accounts use and communicate about the SEED account? Does that communication (or lack thereof) relate to how children perceive their future selves or their educational attainment?

This study drew on two broad theoretical frameworks: The Asset Based Theory of Social Welfare (Sherraden, 1991) and the previously mentioned IBM theory (Oyserman, 2015). In his 1991 book Assets and the Poor, Michael Sherraden theorized that ownership of assets is integral to long-term social development. The central idea of the theory is that the ownership of assets leads to at least nine positive effects, including (1) household stability, (2) an orientation toward the future, (3) development of other assets, (4) focus and specialization, (5) risk taking, (6) personal efficacy, (7) social influence, (8) political participation, and (9) the welfare of future generations. These concepts, as well as the central concepts from IBM theory, guided our inquiry. In our interviews, we used three different semi-structured interview guides for account-holders, non-account-holders, and children. The interview guides touched on topics relevant to IBM, including personal concepts, narratives, frames, and sequences of events. The guides also asked about outcomes relevant to the Asset Based Theory of Social Welfare including future orientation, personal efficacy, and savings behavior.

Though in the larger study we interviewed 50 households, we limited our sample in this study to the 25 families where we interviewed a parent and at least one child.<sup>5</sup> Five of these 25 parent/child dyads did not have any type of dedicated child savings accounts, and 20 had MI-SEED 529 education savings plan accounts. In our interviews, we used different semi-structured interview guides for account-holders, nonaccount-holders, and children. Interviews ranged from 20 min to 2 h. The modal parent interview lasted approximately one hour and the modal child interview lasted approximately 30 min. Interviews were recorded and transcribed verbatim. In addition to the semi-structured interview, we also gave parents a short survey. Data from this survey were then merged into our qualitative database, yielding a database that contained both quantitative and qualitative data. This database was compared to point-in-time account monitoring data from the Michigan Education Savings Program managed by TIAA in December 2015.

#### 4.1. Analysis

We began with an in-depth analysis of the qualitative data. In the first phase of the thematic analysis, codes stemming from the theoretical frameworks cited above were applied deductively to the narrative information detailed in interviews. Parent transcripts (n = 50) were coded by a team of four researchers in the first round of coding. Further disagreements in codes were adjudicated through discussion as a team. Youth transcripts (n = 29) were then coded by a team of two researchers. The pooled Kappa from two randomly selected transcripts coded by randomly selected coders was 0.819. In the second round of coding, a single researcher verified all excerpts and re-coded excerpts when necessary.

In the second phase of the analysis, we narrowed our sample to the 25 parent–child dyads and analyzed each youth interview in conjunction with the respective parent interview. From this analysis phase, vignettes were created for each family by two researchers. The family vignettes integrated quantitative data from the baseline and Wave 2 surveys conducted in 2004 and 2008, as well as the follow-up survey conducted in 2015. We also integrated account monitoring data from 2015 into the family vignettes when appropriate. The vignettes were used as a data generation method drawing from these multiple data

sources and the complex narrative information gathered from the semistructured interviews. They allowed us to generate broad family-level themes by triangulating the quantitative data with the stories, information, and contextual data from the interviews with parents and the interviews with their children. Meaning, rather than being the result of a straightforward deductive coding approach, the three major themes discussed in this paper were derived from primarily qualitative evidence that was then integrated in a convergent manner with quantitative information. The final themes presented here were generated by a single researcher, who verbally reflected on and processed themes with multiple other researchers. This peer debriefing, along with the triangulation of data within and across families, was aimed at increasing the credibility, transferability, dependability/auditability, and confirmability of the findings (Shenton, 2004).

#### 5. Results & discussion

Table 1 details the demographic characteristics of the households and children interviewed at the time of their respective interviews in 2014 or 2015. The mean age of the parent interviewees was 42 years, and 92% of those interviewed were female. The average grade level of the focal child at the qualitative follow-up was approximately grade 9 (8.71). The final household sample was 16% White, 68% Black, and 16% Hispanic/Other race/ethnicity. More than half (60%) of our families reported incomes below \$25,000 a year. Nearly half (40%) of the children interviewed were recorded as having a physical, emotional, or learning disability by their parents at the time of the interview.

A main finding of our study was that the majority of families did not withdraw money from their 529 education savings plan accounts. Because we had identifying information for all SEED participants who completed the baseline survey, we merged the 2015 account monitoring data for families that were part of the treatment group that enrolled in the SEED program to previous 529 account data, as well as survey data. We were able to merge the 2015 data to the past data sources for most of the prior participants (96%, or 225 of the 235 possible). Thus, for the 225 accounts that were matched, we were able to compare their 2015 balances to their 2008 values (see Author, 2018 for more information). We found that 91.1% of the sample (n = 205) gained money in their accounts from 2008 to 2015. Over the same time period, the mean account balance increased by \$553 and the median balance increased by \$206. We also found that 9.8% (n = 20) of the sample lost money in their accounts, presumably from withdrawals that exceeded interest. Mean loss among these types of accounts was \$1026 and median loss was \$850. Three of the 20 account-holding families we interviewed for this study (from the larger sample of 225 account holding prior participants) lost money in their accounts. During our interviews, the families who lost money from their accounts cited severe economic stress as a cause of their withdrawals. Families who did not withdraw money from the accounts viewed the savings as being restricted or identified that they had forgotten about the accounts.

#### 5.1. Communication matters

Resulting from an analysis of the family vignettes, three major themes were developed concerning family dynamics around educational savings and youth educational expectations. First, we found that the families who had accounts and had communicated to their children about the accounts (communicators) were markedly different in terms of expressing their educational expectations compared to the families who had not communicated to their kids about the accounts (noncommunicators). The qualitative evidence we examined led us to develop a typology of families' communication. Of the 20 families we interviewed who had SEED accounts, nine had not told their children about the account (non-communicators), and 11 had communicated with their child about the account (communicators). None of the families we interviewed without SEED accounts (n = 5) had any other

 $<sup>^{5}</sup>$  We interviewed multiple children in three of the 25 families. These are noted in Table 1 in the following section.

#### Table 1

Descriptive characteristics of the children interviewed and their households, 2014-2015.

	Parent's name <sup>a</sup>	Child's name <sup>a</sup>	Estimated HS grad date	Child race/ ethnicity	CChild disabled	Interviewed parent employed	Total household income	Parent marital status
Communicators	April	Zach	2018	Hisp./Oth.	Yes	Yes	50,000-74,999	Married
	Cecilia	Marcela	2018	Hisp./Oth.	No	Yes	30,000-34,999	Married
	Donna	Kevin	2018	Black	No	Yes	40,000-49,999	Never married
	Julie	Tyler	2017	White	No	Yes	15,000-19,999	Div./Sep/Wid.
	Mary <sup>b</sup>	Jonathan	2019	Hisp./Oth.	Yes	Yes	20,000-24,999	Div./Sep/Wid.
	Mary <sup>b</sup>	Justin	2017	Hisp./Oth.	Yes	Yes	20,000-24,999	Div./Sep/Wid.
	Mary <sup>b</sup>	Kaitlyn	2018	Hisp./Oth.	Yes	Yes	20,000-24,999	Div./Sep/Wid.
	Patricia	Alex	2018	White	No	Yes	50,000-74,999	Never married
	Raven	Jasmine	2018	Black	No	Yes	20,000-24,999	Div./Sep/Wid.
	Shauna	David	2018	Black	No	No	25,000-29,999	Married
	Shawn	John	2018	Black	No	No	50,000-74,999	Married
	Tamika <sup>b</sup>	Eli	2019	Black	No	Yes	20,000-24,999	Married
	Tamika <sup>b</sup>	Jacob	2017	Black	No	Yes	20,000-24,999	Married
	Tashina	Olivia	2018	Black	No	No	20,000-24,999	Married
Non-communicators	Abigail	Anthony	2018	Black	Yes	No	5000-9999	Never married
	Carrie	Michael	2018	White	Yes	Yes	10,000-14,999	Married
	Dawn	Joshua	2018	White	No	Yes	15,000-19,999	Married
	Elena	Daniel	2018	Hisp./Oth.	Yes	No	5000-9999	Married
	Eric	Hailey	2017	White	Yes	Yes	5000-9999	Div./Sep/Wid.
	Kimberly	Taylor	2018	White	Yes	No	5000-9999	Never married
	Maria	Martin	2017	Black	Yes	No	35,000-39,999	Married
	Rashawn <sup>b</sup>	Savannah	2017	Black	No	Yes	35,000-39,999	Never married
	Rashawn <sup>b</sup>	Sydney	2017	Black	No	Yes	35,000-39,999	Never married
	Viera	Julia	2018	Hisp./Oth.	Yes	Yes	< 5000	Never married
Non-account holders	Angelina	Natalie	2017	Black	No	No	20,000-24,999	Never married
	Cassandra	Noah	2018	Black	Yes	Yes	5000-9999	Div./Sep/Wid.
	Keisha	Dylan	2018	Black	No	Yes	5000-9999	Never married
	Stephanie	Destiny	2018	Black	No	Yes	30,000-34,999	Div./Sep/Wid.
	Tisha	James	2017	Black	No	Yes	50,000–74,999	Married

<sup>a</sup> To protect participant anonymity, all names are pseudonyms.

<sup>b</sup> These parents appear more than once because we interviewed multiple children in one family.

type of child savings or college accounts. In fact, non-communicators' understanding of the college process was similar to non-accountholding families' understanding. Families with accounts who communicated to their child about the account were likely to discuss concrete aspects of higher education attendance, such as tuition cost, moving costs, majors, the application process, etc.

We found that having dedicated child savings accounts was important to families, but communicating to the child about the account made a real difference in terms of the specificity of a given child's plans for his or her future. This theme, that communication matters, was threaded through our conversations with account-holding parents and children. Parents may have had ideas about what the accounts could do for their child that they shared with us, but unless they communicated these thoughts and ideas to their children, their children's responses to college aspiration questions and college funding questions were essentially the same as the children without SEED accounts.

As shown in Table 2, these conversations may have been related to the higher education expectations reported by children in the communicator families. Kids who knew about the accounts could be more precise about their future educational plans and more detailed in their description of funding decisions related to post-secondary education. This precision and detail formed a key difference between the families the communicated about the accounts and those that did not. After identifying this thematic typology of communication, we compared youth's self-identified educational expectations by group. We found that communicators had an overall higher self-reported education expectation (16.4 years), compared to the non-communicators (14.1 years) and non-account-holders (15.0 years). In other words, communicators expected to graduate from a four-year undergraduate institution, while the non-communicators and non-account-holders groups expected some college attendance or an associate's degree.

As shown in the exemplary quotes detailed in Table 2, the youth from communicating families typically discussed the specific costs

associated with college attendance. In our analysis, we found that parents who had talked to their kids about the SEED accounts also typically had conversations about what the accounts could realistically purchase. In these conversations, parents with lower account amounts identified that the accounts would be helpful in terms of paying for smaller expenses, like books. Tamika's son Jacob understood that the account could not pay for everything but would be helpful nonetheless. When asked if he thought the SEED savings would help, he replied, "it might be ... just to cover up extras, costs like books or whatever." Shawn had been preparing his son John to attend college for years, making "sure that the education [was] there" by seeking and obtaining a private high school scholarship. As part of preparing John for college, Shawn had discussed the SEED account with him. John, in a separate interview, told us, "I think [the account will] help a lot" in covering basic things that might not be covered by loans or scholarships. Parents, like Shawn, who had talked to their children about the accounts, often also talked to their children about the total cost of attendance. These conversations likely meant that families had often discussed the concrete aspects of attendance early in a child's high school career. In some cases, parents like Olivia's mom encouraged their kids to seek options that would save money, like starting out at a community college, or going somewhere close to home to save money on housing.

In contrast, the majority of the children in the nine non-communicating families expressed vague ideas about college attendance. The children from these families expected, on average, to attain 14.1 years of education, roughly translating to an associate's degree or some college. Elena's son Daniel said he expected to, "graduate and go to college, maybe, not for a long time, but maybe a year or two." Viera's daughter Julia said, "I'll probably just go and finish high school. Probably go direct—a little bit of college." Rashawn's daughter Savannah said she had no idea how much education she wanted or expected to attain. Similarly, when asked if she would graduate high school, Savannah said, "hopefully I will." Eric's daughter Hailey gave a

#### Table 2

Qualitative and quantitative measures of the impact of communication on expectations.

	Communicators	Non-communicators	Non-account holders
	<i>n</i> = 11	<i>n</i> = 9	n = 5
Youth's self-reported educational expectations (in years)	16.4	14.1	15.0
The Impact of Communication on Expectations	I think [the account is] great, it's going to help me for college and pay for books and things like that when I head off. And my first year, my mom told me I shouldn't go away. I should go to a [community college], so in a year I could prepare myself to go away for second year. (Olivia, 15) My mom was showing me how like realistic prices they're going to be and stuff like that. She just showed me like a few pictures of the campuses and everything likethe colleges and how you have to actually work hard for it. (Marcela, 16)	I know I'm going on to college, but I'm not sure how long I wanna do school, cuz I don't really like school that much. But I like being there with friends, so I don't know what I'm doing. (Hailey, 15) Daniel, 16, said he expected to: "Graduate and go to college, maybe, not for a long time, but maybe a year or two."	I wanna go to college to see if they have an art institute, so I can get better in drawing and stuff. I'm very good with sketchin', so that's what I wanna start off with. Eventually work up to something better. I expect if I don't get into college, I'll finish high school. (Dylan, 16)

little more detail but remained vague on whether or not she actually saw herself graduating college (see Table 2).

None of the five non-account-holding families we interviewed had saved for their children's college education, nor had they saved in any dedicated accounts for their children. The children from these families expected, on average, to attain 15 years of schooling, which is just above an associate's degree. We were struck by how similarly the children from the non-account-holding and the children from the noncommunicating groups talked about college attendance.

In our interpretation, these interviews showed that communication does seem to play an important and meaningful role in helping children and parents think concretely about future educational attainment. This concrete envisioning or framing may be evidence of the formation of college-going identities, which may possibly translate to greater educational attainment. We theorize that these children, with more detailed educational plans and more precise understandings of educational expenses, may be better prepared for getting into, attending, completing, and funding college.

#### 5.2. Tensions between college aspirations and concrete steps to get there

Second, we often noted tensions between college aspirations and concrete steps needed to get there. Many parents reported high educational aspirations for their children, and many children reported high educational aspirations for themselves. However, parents, facing multiple barriers, were often under-informed about the multiple educational options available to their children, as well as the academic requirements for a traditional undergraduate institution. In addition, when asked how they might pay for college, the majority of parents reported that they expected their children to get scholarships. Some parents appeared to have an unclear understanding of the competitive nature of the scholarships and the concrete steps needed to be taken by their children in high school to attain post-secondary educational support.

Many parents we interviewed wanted to see their children achieve high levels of education, but often those same parents spoke in vague terms when it came to the concrete steps that it would take to get their kids there. When asked how much education she expected her daughter to attain, Tina said she saw her daughter Ashley not just attending college but graduating from college. Ashley, age 14, had recently switched from regular school to a virtual academy (i.e., an online homeschooling curriculum). Tina said that the school Ashley was going to before the switch was unsafe and that she wanted better for her daughter. However, Tina also lamented that Ashley had not been improving her grades: "She is scoring low, so they're constantly resetting the programs for her because she's scoring low and they ... like what's going on?" When we arrived to conduct the interview, it was about 10 am on a weekday, and Ashley was not awake yet. When we asked Tina if and how she talked to her daughter about going to college, she said:

I tell her that my mom went to college. My mom finished high school when she was 16 [...] I say you can do it. I mean she's living proof. I say you can do it and sometimes I tell her well, I'm gonna go back. I am, and then I sit here and say I'm still making excuses cuz I keep saying I'm gonna go back instead of saying I'm going back right now, so I think if she sees me—if they see me trying, then I think that'll help them boost their confidence a little better. If I tried, then they'll try. Somebody will have to set an example. Yeah.

Like Tina and many others from families with and without accounts, we heard parents' tensions between wanting their child to excel in school, even changing schools or the school environment to make that happen, but then not being able to take the additional concrete steps to ready their child for college. Concrete steps included saving for college, encouraging positive study habits and challenging academics, communicating with teachers and ensuring grade improvement, seeking out information about admissions requirements or deadlines, and communicating actively to their children about future educational opportunities. Tina's statements indicated regret at not setting a better example for her daughter, though her barriers to this—working full time at minimum-wage jobs without a high school degree—were substantial.

Tisha, another mother we spoke to, had just bought a house with her husband and moved their three kids into a much better school district compared to the one they were in previously. We spoke to Tisha and her son James in July, after he had just finished his freshman year at the new high school. His grades had dropped precipitously in the previous year, so much so that he—a talented athlete—was barred from playing basketball in the winter. Though Tisha had a plan for checking the "online portal" to see if he was keeping up on his homework in the fall, James did not articulate a detailed plan for changing his academic outcomes. James seemed committed to working hard sophomore year, insofar as it would allow him to continue to play sports:

[...] If I don't take the school more seriously, then I think that I will lose the passion for it, for football, because it really didn't happen with me in basketball, but it just really made me—it made me not really wanna go to school anymore. Because I just lost it. Emotionally, I just—I lost it, so— if I know that I—if I don't get it together in school, then I think I'm gonna lose the passion for [football].

Though his mom identified that the move to the new school district was intended to open doors for her kids, it also created new challenges in terms of her son's education, "[The new high school] was kinda like a culture shock to them because their learning pace—well, the way they teach is a faster paced than what they teach [at previous school]. It was so much more advanced ..." James echoed with the new challenges he faced:

On the first day of school, I really had—I really got to see how it was at high school as far as the people and the schoolwork, and then they hit me on the first day with all this work. I was like, "Wow," and then, ever since from then—ever since that school year, I procrastinated a lot. Said I was gonna do it. I didn't do it. I did that instead of doin' my homework, stuff like that.

Without a SEED account, Tisha had not saved for James's college otherwise. James said that he felt "it'll be really hard" to pay for college without a scholarship. However, he offered, "I'm extremely confident that I'll get a scholarship and go to college for free."

Many parents and children, both in the control and treatment groups, also stated that they felt they would be able to pay for college through scholarships. However, only one family we spoke to (Cecilia and Marcela) talked about the connection between academic performance and scholarship receipt. It is possible that families were knowledgeable about the competition for college scholarships and just did not mention it to us. It is also possible that they considered the Pell Grant as a kind of scholarship. Indeed, many of the children in our sample would qualify for Pell Grants if they applied. Still, it is telling that none of the families we spoke to talked about the concrete steps in applying for scholarships, admissions requirements at higher education institutions, or steps in the process of applying to higher educational institutions, particularly because they were only a few short years away from graduating high school.

We also spoke to a few families whose children were not doing well in school due to behavioral or peer concerns. Very few of the families had any concrete things to say about how these negative behaviors, often resulting in suspensions or expulsions, might impact their children's academic outcomes. We often heard vague statements that their children needed to stop hanging out with the "bad kids" or "get it together."

Rashawn spoke to us about her two middle daughters, Sydney and Savannah, both SEED account-holders. A mother at age 14, Rashawn had gone back to school as an adult and obtained some college credits and a certificate. After extensive planning, she had recently moved her four daughters and granddaughter from a rough neighborhood and bad school district to a nicer house in a safer area of the city. However, her two middle daughters were not enjoying the transition to the new school. Rashawn explained Sydney's recent decline in school:

She's brought home 4.0s before and when they take the standardized test, she's always in the top percentile. Then as she's starting to get older, she's been getting into trouble so she's been kicked out of school several times. Her behavior is causing her to not be in school that she wants to.

When asked if she thought Sydney would go to college, Rashawn said, "I do. I think she'll get it together." But when asked what she says when she talks to Sydney about college, she repeated, "Just that she need to get it together." Keisha, mother of Dylan, echoed similar nonspecific concerns about her son's negative peer influences and less-thanoptimal behavior, stating, "He has to get on track, he has to. Like I told him, I don't wanna see him in jail, prion, or under the soil." The task of preparing kids to attend college and supporting them in the application process may be too challenging for some of the parents in our sample without additional supports. Most of these parents were already working hard to get their kids into safer schools, buy homes, upgrade their own educations, or simply make ends meet.

# 5.3. The limits of CSAs: substantial barriers to secondary education for families

Third, the limits of CSAs or college savings in general was another theme that threaded through our conversations with account-holding and non-account-holding families. Many families stressed to us the multiple substantial barriers to post-secondary educational attainment that they faced. These barriers are part of the complex context surrounding low income families targeted by mobility-enhancing interventions like MI-SEED.

#### 5.3.1. Extreme and severe economic hardships post-recession

Though some families' economic situations had improved since they enrolled in Head Start, most of the families we interviewed were still struggling with the aftermath of the Great Recession. Some had suffered housing losses and destroyed credit stemming from the subprime mortgage crisis; others had lost good jobs and had only been able to replace them with non-standard employment; and some had attempted to "upskill" with education, only to be saddled with major student loan debts in a weakly recovered job market.

The economic difficulties faced by the families with whom we spoke were compounded by the geographical context of suburbia. Families were thus not only living in personally difficult economic situations but were embedded in an environment with limited access to transportation, social services, subsidized housing, or food pantries. The growth in suburban poverty has created what Scott Allard (2017) calls, "places in need" that are disconnected from traditional safety nets. These hardships have formed a context of disadvantage that, in our interpretation, illustrates the constraints facing CSAs in promoting a measurably longterm solution to the multidimensional challenge of economic immobility.

These challenges are illustrated by Shawn and his family, who lived at the end of a quiet suburban street in a house that they owned. Shawn had been on disability for the past seven years, and his wife, while managing a fast-food restaurant, was suffering the effects of Multiple Sclerosis. Shawn and his wife were trying to "keep the dream alive" to open up a small business but were having trouble obtaining the permits they needed. In Shawn's estimation, they had lost a substantial amount of money trying to keep this dream alive, spending down their savings and retirement accounts significantly in the process. Shawn stated:

For the last couple years since we haven't been able to save. Actually, things have been going the opposite way. We've been spending more than we've been saving. We didn't never really have [savings] other than that seed account, which we probably haven't contributed to that since maybe 2007 maybe or so.

Shawn and his wife had done everything they could to try to secure an income stream that could be maintained into the future. They had raised their children to value education, trying to save where possible, but had not been able to save beyond the initial amounts they had stored in the SEED account when their son John was young.

Similarly, Michelle and her husband reported that they brought in less than \$10,000 per year. With two kids and only one income, Michelle said, "[We] just don't have enough money to keep up with the things that we have to have. The expense is high, so you think you get ahead, and then something needs to be taken care of." Her son Andrew was doing well in high school, getting As and Bs. Michelle articulated high hopes for Andrew to attend college, despite having limited savings in their SEED account and no other savings. Many families we spoke to suffered the effects of persistent, complex, multidimensional economic deprivation, and, like Michelle and Shawn, saving independently for their children's future was simply infeasible.

#### 5.3.2. The child's negative school and peer environment

Many of the families we spoke to were disappointed at best and distraught at worst by the kinds of schools that their children were attending. Indeed, the State of Michigan identified in its "scorecard" school rating system that many of the schools our participants attended met < 50% of the proficiency targets set out by the state. The children explained the realities of attending these subpar schools, speaking to us at length about the challenges in their school environment. The majority of the kids and parents we interviewed identified that they did not like their schools. They listed many concerns. Some were concerned that the schools were under-resourced ("they broke" Cassandra's son, Noah, said), while others were concerned that the teachers did not seem to be invested in their children's success.

The main concern we heard from parents and their children was simply that the schools were not safe. Tashina's daughter Olivia explained, "there's plenty of fights every day nonstop, all day." Olivia said she kept herself safe through "self defense." Predictably, these difficult school environments limited learning opportunities. Raven's daughter Jasmine was academically minded and said she expected to go on to get a four-year degree. But she was frustrated by her current school environment and its impact on her learning opportunities. She lamented:

It makes me really mad because, guess what? We didn't learn everything we were supposed to learn that day, and then next thing you know we got homework on it. Then you don't know what to do.

The negative school environment also translated into negative peer influences. Keisha's son Dylan explained how he limits his friend group to stay out of trouble: "I know they're doing bad stuff, so [being around lots of people] gonna eventually make me wanna do the bad stuff that they doing."

A few of our families had moved in order to access better school districts. Kids who had moved out of struggling school districts into better schools sometimes spontaneously and reflectively compared the schools. Tisha's son James reflected:

I look at a school like [previously attended high school in struggling neighborhood], and then I look at [current high school], and at [old school...] their school isn't as advanced as mine or as my school that I go to. I think the teachers at [old school], I think they care about their students, but they don't care as much as [new school]. To tutor you and to really stay after class with you and push you—but I don't think everyone has the same opportunities.

#### 5.3.3. Adjusting to the special needs of children

Of the 29 youth we interviewed, 11 (37.9%) had been identified by their parents as having a disability or learning impairment. The proportion of children identified with learning or physical disabilities in our sample is substantially higher than estimated national averages; 37.9% in our sample were identified by their parents as disabled compared to 7.9% in the population of U.S. children (Houtrow, Larson, Olson, Newacheck, & Halfon, 2014) and 12.9% of children ages 3-21 enrolled in public schools (U.S. Department of Education, National Center for Education Statistics, 2016). Demographic factors largely explain the high prevalence of childhood disability in our sample. Studies examining the general population prevalence of childhood disability have found that disability rates are higher in poor, non-white, lower-educated, single-parent households and that these rates are highest for children born after 2000 (Houtrow et al., 2014; Van Cleave, Gortmaker, & Perrin, 2010). Our parents qualified for Head Start in 2003/2004, and the majority of them were young, single parents living below the poverty line. Our qualitative interview sample was 68% African-American, compared to about 14% in the general population, as well. Additionally, children qualify for Head Start services through various means, including identification of developmental disabilities. Therefore, it is not surprising that our sample contained many children with learning or physical disabilities.

The fact that we interviewed so many young men and women dealing with learning and physical challenges did influence the data we collected. First, sometimes communication difficulties impacted the interview flow. Second, we could not always ensure that the meaning or intent of our questions was understood by the children we interviewed in general, and in particular by those with developmental delays or learning disabilities (though it should be noted that this kind of communication difficulty exists at some level in any interview). Third, we suspect that some of the low educational expectations parents had for their children were related to the high prevalence of disabilities in our sample. We did not ask direct questions about this to the parents we interviewed, but there were many parents who noted that their children's challenges would limit the level of education their children would obtain and the types of educational environments in which they envisioned their children being successful. For example, Maria's adopted son Martin was born with slight physical and mental disabilities. Maria said, "Well, I don't think he's-gonna go to college because of his defect about being slow a little bit, but he's definitely gonna take a trade." Many of the parents whose children had special needs were more focused on ensuring that they made it through high school. When we interviewed Lisa, whose son Zach had multiple mental health and learning challenges, she simply stated, "I hope that he can complete high school."

#### 6. Conclusions

Taken as a whole, our results underscore what has been asserted elsewhere: it is important to provide the CSA intervention and to start conversations about college savings with parents early. We extend this assertion by showing that, among our sample, communicating about the account seemed to be connected to children's educational expectations through the specificity of their narratives about their future plans. Though prior work has shown a connection between CSAs (and family assets more broadly) and educational expectations, our findings are novel because we were able to interview both parents and children about their educational expectations as the child entered high school—a decisive point in the child's life course.

We found that the vast majority of SEED account holding families maintained their deposits, and, among our interview sample, only three families withdrew funds. For low-income families that are struggling to pay basic expenses, any kind of saving is hard. Multiple barriers exist for families in terms of creating and maintaining savings. However, the account-holding families appeared to value the initial MI-SEED deposits made for their children and typically did not withdraw these funds, even during historically dire economic conditions. In fact, 91.1% of the sample gained money in their accounts from 2008 to 2015. These families demonstrated their interest in college savings both by not making unqualified withdrawals from the accounts and/or by continuing to save in the accounts. Given the economic circumstances of Southeast Michigan between 2008 and 2015, the fact that families maintained any savings at all in the MI-SEED accounts is a strong result.

Though the families in this study often faced multiple severe barriers to economic well-being, and few made additional MI-SEED account deposits, it was clear that there were differences between parents who communicated actively to their children about the child savings accounts and those who did not. Families that communicated about the accounts had a detailed understanding of the "true" cost and complexity of higher education and the children in these families were more precise about their future educational plans compared to those who in general did not communicate about the accounts. We found that children whose parents actively communicated to them about their accounts were more likely to speak in ways that were specific, detailed, active, and positively oriented toward a future self that was involved in higher education, which is evidence of the development of collegegoing identities formation. These thematic findings also lend support for other aspects of Identity Based Motivation (IBM) theory. In particular, our finding that communication mattered to the educational aspirations of the children supports the concept of identity congruence. Parents who communicated about the MI-SEED accounts may have

helped their children imagine a clearer future college-going self that was connected to the present. We theorize that the children in these families, with more detailed understandings of educational expenses, may be better prepared for getting into, attending, completing, and funding college.

#### 6.1. Implications for policies and interventions

Our findings have implications for CSA program administrators and CSA researchers. One implication is that there appears to be a need for a common vision and understanding of the accounts between parents and children. This common vision could be facilitated by parents through direct communication with their children, or it could be facilitated by the CSA programs. Parents who have successfully navigated educational institutions themselves may be well positioned to share their visions of higher educational attainment for their children with their children. A parent's educational involvement with their child, including concrete discussions about college attendance, has been shown to be related to a child's educational aspirations (McCarron & Inkelas, 2006). Depending on their knowledge of higher education, parents can thus be instrumental in either connecting or disconnecting their children to information that might help steer them toward college. However, not all parents who want their children to attend college and who enroll in a CSA program have firsthand knowledge of higher education.

In the context of a CSA program, the common vision could also come with materials prepared for parents with information on concrete steps for college preparation or with age-appropriate reminders about college saving offered by the CSA program via mail or email. CSA programs may also want to develop materials specifically targeted to parents who have not attended college. In addition, participants could be referred to local college access networks, mentors, or other positive supports to help youth make wise choices regarding post-secondary options. Adding a college preparation component to existing CSA programs at key turning points in the transition to adulthood may also help children whose parents have low educational levels leverage the full potential of CSA programs.

Although direct connections to Head Start programming were not as strong in MI-SEED as anticipated, partnering with the educational programs of participants and trusted staff could be an integral component of the success of CSA programs. This may even be more critical in an ongoing program as opposed to a short-term intervention like MI-SEED. Many of the emerging programs over the last few years are being intentional about having a presence in schools and connecting to local community resources. In Michigan, the Lansing SAVE college savings account program is collaborating with the HOPE scholarship, college access networks, Lansing Promise scholarship, and financial empowerment programs to generate a continuum of opportunity for students. Such partnerships might be especially necessary in supporting participants facing multiple barriers.

#### 6.2. Limitations and future work

As with any study, there are limitations to our findings. First, our sample was relatively small. Though we were able to track down and interview 25 families nearly ten years after the intervention and original impact study had ended, a larger sample size would have allowed us a better understanding of patterns across families. Second, our sample was not representative of the original treatment and control groups. The challenges of recruitment in turn posed challenges to our ability to secure representative sub-samples of these original groups. Though our research questions do not attempt to make comparisons between these two groups, the small number of control group families in our samples poses a challenge to the transferability of our findings for non-account holding and non-treatment group participants. Finally, we did not focus on the causal impact of the CSA program in our study, thus our study cannot speak to how CSAs might affect changes in families themselves, net of the multitude of other factors present in families.

It should also be noted that characteristics such as socioeconomic status (SES) and background may influence a parent's likelihood to communicate about college, have high aspirations for their child, and transmit those aspirations to their child. The ability of parents to be concrete in communication regarding higher education is likely related to their own knowledge of higher education as well. In this study, it was not possible to observe all of the relevant characteristics that might influence a family's communication pattern regarding higher education. However, we did find that the parents in our sample had lower educational levels than the national average. In 2015, nearly 47% of Americans aged 35-44 had obtained an associate's degree or more (Ryan & Bauman, 2016). Whereas, in our sample, 36% had obtained an associate's degree or more (mean age of the parents was 41.8 years). The relatively low educational attainment of the parents in this sample may be a reason some struggled to connect aspirations for their children's education with actions. However, we found that there were no distinguishable patterns regarding SES or background and the communication patterns in families, leading us to believe that there was no pattern between SES/background, communication, and child self-reported aspirations. This finding was debriefed on and triangulated through multiple data sources.

Based on our interviews, we observed that the patterns of communication in families with and without child savings accounts were connected to the specificity of children's narratives about their future educational attainment. Taken together, our findings suggest that the impact of active long-term engagement with CSA accounts appears to be large. Though the plurality of parents we interviewed, regardless of SES, had college-going expectations for their child, and all children articulated, to varying degrees, intentions for a transition to adulthood that included education, the parents who communicated actively to their children about their child savings accounts also had children with higher self-reported education expectations. These children were also more concrete about their future plans. Children's self-concepts and identities may be shifted toward current preparation for college through this type of direct parental influence. Our results show that for the families we spoke to, having the accounts may have mattered, but communicating to the child about the account itself also likely mattered. Future research on this topic should attend to measurement of the multidimensional long-term impacts of CSAs for low income families. More work also needs to be done to tease out the direct and indirect effects of child savings accounts on child outcomes. Our study may provide contextual evidence for future study that specifically tests whether sustained parental communication is an important and strong mechanism for the effects of child savings accounts on child outcomes.

#### Acknowledgements

We thank Megan Edmunds, Elizabeth Koomson, Patrice Barden, Vanessa Boddy, and Tameka Ramsey for their excellent research assistance. We also appreciate the support of Robin Lott, Executive Director of the Michigan Education Trust/Michigan Education Savings Program. The SEED Research Advisory Council provided feedback and support in developing the project. Most importantly, we thank all of the parents and children who took the time to share their thoughts, experiences, and insights with us.

#### **Declaration of interests**

None.

#### Funding

This work was supported in part by the Ford Foundation, the SEED Research Advisory Council, and by an NICHD training grant to the Population Studies Center at the University of Michigan (T32HD007339).

#### References

Abel, J. R., & Deitz, R. (2014). Do the benefits of college still outweigh the costs? Current Issues in Economics and Finance, (5), 20. Retrieved from https://www.newyorkfed. org/medialibrary/media/research/current issues/ci20-3.pdf.

- Allard, S. W. (2017). Places in need: The changing geography of poverty. New York: Russell Sage Foundation.
- Bailey, M. J., & Dynarski, S. M. (2011). Inequality in postsecondary education. In G. J. Duncan, & R. J. Murnane (Eds.). Whither opportunity? Rising inequality, schools, and children's life chances (pp. 117–132). New York, NY: Russell Sage Foundation & Spencer Foundation.
- Barrow, L., & Malamud, O. (2015). Is college a worthwhile investment? Annual Review of Economics, 7(1), 519–555. https://doi.org/10.1146/annurev-economics-080614-115510.
- Beverly, S. G., Clancy, M. M., Huang, J., & Sherraden, M. (2015). The SEED for Oklahoma Kids Child Development Account Experiment: Accounts, assets, earnings, and savings (CSD Research Brief No. 15–29)St. Louis, MO: Center for Social Development.
- Brand, J. E., & Xie, Y. (2010). Who benefits most from college? Evidence for negative selection in heterogeneous economic returns to higher education. *American Sociological Review*, 75(2), 273–302. https://doi.org/10.1177/0003122410363567.
- Cahalan, M., Perna, L., Yamashita, M., Ruiz, R., & Franklin, K. (2016). Indicators of higher education equity in the United States: 2016 historical trend report. Washington, DC: Pell Institute for the Study of Opportunity in Higher Education, Council for Opportunity in Education (COE) and Alliance for Higher Education and Democracy of the University of Pennsylvania (PennAHEAD). Retrieved from http://www.pellinstitute.
- org/downloads/publications-Indicators\_of\_Higher\_Education\_Equity\_in\_the\_US\_2016\_ Historical\_Trend\_Report.pdf.
- Chetty, R., Friedman, J., Saez, E., Turner, N., & Yagan, D. (2017). Mobility report cards: The role of colleges in intergenerational mobility (w23618)Cambridge, MA: National Bureau of Economic Researchhttps://doi.org/10.3386/w23618.
- Clancy, M. M., Sherraden, M., & Beverly, S. G. (2015). College savings plans: A platform for inclusive and progressive child development accounts (CSD Policy Brief No. 15-07). St. Louis, MO: Center for Social Developmenthttps://doi.org/10.7936/K7F18Z8T Retrieved from.
- Davis-Kean, P. E. (2005). The influence of parent education and family income on child achievement: The indirect role of parental expectations and the home environment. *Journal of Family Psychology: JFP: Journal of the Division of Family Psychology of the American Psychological Association (Division 43)*, 19(2), 294–304. https://doi.org/10. 1037/0893-3200.19.2.294.
- Destin, M., & Oyserman, D. (2009). From assets to school outcomes: How finances shape children's perceived possibilities and intentions. *Psychological Science*, 20(4), 414–418. https://doi.org/10.1111/j.1467-9280.2009.02309.x.
- Elliott, W. (2009). Children's college aspirations and expectations: The potential role of children's development accounts (CDAs). *Children and Youth Services Review*, 31(2), 274–283. https://doi.org/10.1016/j.childyouth.2008.07.020.
- Elliott, W. (2018). An asset-building agenda for the twenty-first century: Giving families something to live for. *Journal of Children and Poverty*, 1–14. https://doi.org/10.1080/ 10796126.2018.1493802.
- Elliott, W., & Beverly, S. G. (2011). The role of savings and wealth in reducing 'wilt' between expectations and college attendance. *Journal of Children and Poverty*, 17(2), 165–185. https://doi.org/10.1080/10796126.2011.538375.
- Elliott, W., Chowa, G., & Loke, V. (2011). Toward a children's savings and college-bound identity intervention for raising college attendance rates: A multilevel propensity score analysis. Sociology Mind, 01, 192. https://doi.org/10.4236/sm.2011.14025.
- Elliott, W., & Harrington, K. (2016). Identifying short term outcome metrics for evaluating whether children's savings accounts programs are on track (Community Development Issue Briefs) Boston, MA: Federal Reserve Bank of Boston. Retrieved from https:// www.bostonfed.org/publications/community-development-issue-briefs/2016/ identifying-short-term-outcome-metrics-for-evaluating-whether-childrens-savingsaccounts-programs-are-on-track.aspx.
- Elliott, W., & Sherraden, M. (2013). Assets and educational achievement: Theory and evidence. *Economics of Education Review*, 33, 1–7. https://doi.org/10.1016/j. econedurev.2013.01.004.
- Grinstein-Weiss, M., Shanks, T. R. W., & Beverly, S. G. (2014). Family assets and child outcomes: Evidence and directions. *Future of Children*, *24*(1), 147–170.
- Hout, M. (1984). Status, autonomy, and training in occupational mobility. American Journal of Sociology, 89(6), 1379–1409.
- Hout, M., Raftery, A. E., & Bell, E. O. (1993). Making the grade: educational stratification in the United States. In Y. Shavit, & H.-P. Blossfeld (Eds.). *Persistent inequality: Changing educational attainment in thirteen countries* (pp. 25–50). Boulder, Colo: Westview Press.
- Houtrow, A. J., Larson, K., Olson, L. M., Newacheck, P. W., & Halfon, N. (2014). Changing trends of childhood disability, 2001–2011. *Pediatrics*, 134(3), 530–538. https://doi. org/10.1542/peds.2014-0594.
- Huang, J., Kim, Y., Sherraden, M., & Clancy, M. (2017). Unmarried mothers and children's social-emotional development: The role of child development accounts. *Journal* of Child and Family Studies, 26(1), 234–247. https://doi.org/10.1007/s10826-016-0551-1.
- Huang, J., Sherraden, M., Kim, Y., & Clancy, M. (2014). Effects of child development

accounts on early social-emotional development: An experimental test. JAMA Pediatrics. https://doi.org/10.1001/jamapediatrics.2013.4643.

- Huang, J., Sherraden, M., & Purnell, J. Q. (2014). Impacts of child development accounts on maternal depressive symptoms: Evidence from a randomized statewide policy experiment. Social Science & Medicine, 112, 30–38. https://doi.org/10.1016/j. socscimed.2014.04.023.
- Karimli, L., & Ssewamala, F. M. (2015). Do savings mediate changes in adolescents' future orientation and health-related outcomes? Findings from randomized experiment in Uganda. *Journal of Adolescent Health*, 57(4), 425–432. https://doi.org/10.1016/j. jadohealth.2015.06.011.
- Markoff, S., Copeland, M., & Quezada, D. (2018). The movement takes off: The state of the children's savings field 2017. Washington, DC: Prosperity Now.
- Marks, E. L., Engelhardt, G., Rhodes, B. B., & Wallace, I. (2014). SEED for Oklahoma kids: The impact evaluation. Research Triangle Park, NC: RTI International.
- Marks, E. L., & Rhodes, B. B. (2009). A process study of the SEED community partners initiative. Research Triangle Park, NC: RTI International.
- Marks, E. L., Rhodes, B. B., Engelhardt, G. V., Scheffler, S., & Wallace, I. F. (2009). Building assets: An impact evaluation of the MI SEED Children's Savings Program. Research Triangle Park, NC: RTI International.
- McCarron, G. P., & Inkelas, K. K. (2006). The gap between educational aspirations and attainment for first-generation college students and the role of parental involvement. *Journal of College Student Development*, 47(5), 534–549. https://doi.org/10.1353/csd. 2006.0059.
- Morse, J. M. (2017). Essentials of qualitatively-driven mixed-method designs. New York, NY: Routledge, Taylor & Francis Group.
- Morse, J. M., & Cheek, J. (2014). Making room for qualitatively-driven mixed-method research. Qualitative Health Research, 24(1), 3–5. https://doi.org/10.1177/ 1049732313513656.
- Musu-Gillette, L., Robinson, J., McFarland, J., KewalRamani, A., Zhang, A., & Wilkinson-Flicker, S. (2016). Status and trends in the education of racial and ethnic groups 2016. NCES 2016-007 Washington, DC: Department of Education, National Center for Education Statistics. Retrieved from https://nces.ed.gov/pubs2016/2016007.pdf.
- Oyserman, D. (2013). Not just any path: Implications of identity-based motivation for disparities in school outcomes. *Economics of Education Review*, 33, 179–190. https:// doi.org/10.1016/j.econedurev.2012.09.002.
- Oyserman, D. (2015). Pathways to success through identity-based motivation. New York, NY: Oxford University Press.
- Oyserman, D., & Destin, M. (2010). Identity-based motivation: Implications for intervention. The Counseling Psychologist, 38(7), 1001–1043. https://doi.org/10.1177/ 0011000010374775.
- Pfeffer, F. T. (2017). Growing wealth gaps in education (Working Paper) Ann Arbor, MI: University of Michigan. Retrieved from http://fabianpfeffer.com/wp-content/ uploads/Pfeffer2017.pdf.
- Prosperity Now (2017). Find a children's savings program. Retrieved from https:// prosperitynow.org/map/childrens-savings.
- Prosperity Now. Prosperity Now scorecard. (2018). Retrieved September 12, 2018, from https://scorecard.prosperitynow.org/poi-map-iframe?types=csp (csi).
- Rauscher, E., Elliott, W., O'Brien, M., Callahan, J., & Steensma, J. (2017). Examining the relationship between parental educational expectations and a community-based children's savings account program. *Children and Youth Services Review, 74*, 96–107. https://doi.org/10.1016/j.childyouth.2017.02.005.
- Reeves, R. V. (2017). Dream hoarders: How the American upper middle class is leaving everyone else in the dust, why that is a problem, and what to do about it. Washington, DC: Brookings Institution Press.
- Rothwell, D. W., & Han, C.-K. (2010). Exploring the relationship between assets and family stress among low-income families. *Family Relations*, 59(4), 396–407.
- Ryan, C. L., & Bauman, K. J. (2016). Educational attainment in the United States: 2015 (P20-578) Washington, DC: US Census Bureau. Retrieved from https://www.census.gov/ content/dam/Census/library/publications/2016/demo/p20-578.pdf.
- Shenton, A. K. (2004). Strategies for ensuring trustworthiness in qualitative research projects. Education for Information, 22(2), 63–75. https://doi.org/10.3233/EFI-2004-22201.
- Sherraden, M. (1988). Rethinking social welfare: Toward assets. Social Policy, 18(3), 37–43.
- Sherraden, M. (1991). Assets and the poor: A new American welfare policy. Armonk, NY: M.E. Sharpe.
- Torche, F. (2011). Is a college degree still the great equalizer? Intergenerational mobility across levels of schooling in the United States. *American Journal of Sociology*, 117(3), 763–807.
- U.S. Department of Education, National Center for Education Statistics (2016). Digest of education statistics, 2014 (NCES 2016-006). Retrieved from http://nces.ed.gov/ fastfacts/display.asp?id=64.
- Van Cleave, J., Gortmaker, S. L., & Perrin, J. M. (2010). Dynamics of obesity and chronic health conditions among children and youth. JAMA, 303(7), 623–630. https://doi. org/10.1001/jama.2010.104.
- Williams Shanks, T. R. (2007). The impacts of household wealth on child development. Journal of Poverty, 11(2), 93–116. https://doi.org/10.1300/J134v11n02\_05.
- Williams Shanks, T. R., & Robinson, C. (2013). Assets, economic opportunity and toxic stress: A framework for understanding child and educational outcomes. *Economics of Education Review*, 33, 154–170. https://doi.org/10.1016/j.econedurev.2012.11.002.
- Ziol-Guest, K. M., & Lee, K. T. H. (2016). Parent income–based gaps in schooling: Crosscohort trends in the NLSYs and the PSID. AERA Open, 2(2), https://doi.org/10.1177/ 2332858416645834 233285841664583.