VERNON LOKE, LAURA CHOI, AND MARGARET LIBBY

Increasing Youth Financial Capability: An Evaluation of the MyPath Savings Initiative

Although there has been mixed evidence from research on the efficacy of financial education efforts for youth, there is an emerging consensus that focusing on financial capability may be a more effective approach. This article examines the impact of the MyPath Savings pilot on 275 economically disadvantaged youth participating in a youth development and employment program. MyPath Savings targets youth earning their first paycheck—a critical "teachable moment" to promote savings and connect youth with mainstream financial products. The results indicate that MyPath Savings is highly relevant to participants' needs. In addition, youth experienced significant increases in financial knowledge, financial self-efficacy, and the frequency with which positive financial behaviors were carried out. Participants also saved an average of $507 through MyPath Savings. Gains in financial capability were mostly independent of the youths' race, gender, household income, and public benefits receipt. Possible factors for the promising results are discussed.

Household financial stability remains a critical challenge in many low- and moderate-income (LMI) communities, and the recent economic crisis has demonstrated that the skills related to personal financial management are more important than ever. However, many Americans struggle to make the most of their income and keep what they earn. These challenges are compounded in underserved communities, where many households may be unbanked or underbanked and lack access to mainstream financial institutions (Burhouse and Osaki 2012). Therefore, activities that develop financial capability, which includes both financial knowledge and access to financial services, at an early stage in life, may be an important intervention for promoting long-term financial stability, particularly among underserved youth.

Although there has been mixed evidence from research on the efficacy of financial education efforts for youth (Hathaway and Khatiwada 2008; Lyons et al. 2006) there is an emerging consensus that focusing on financial

Vernon Loke (vloke@ewu.edu) is an Associate Professor at Eastern Washington University, Laura Choi (laura.choi@sf.frb.org) is a Senior Research Associate at the Federal Reserve Bank of San Francisco, and Margaret Libby (mlibby@mission.coop) is the Executive Director at MyPath.

The Journal of Consumer Affairs, Spring 2015: 97–126
DOI: 10.1111/joca.12066

capability may be a more effective approach (Executive Order 13646 2013; Johnson and Sherraden 2007). This article reviews the literature on financial education efforts to date and examines the MyPath Savings financial capability initiative. It seeks to understand the extent to which the MyPath Savings financial capability initiative affects financial behaviors and attitudes among disadvantaged youth who are employed and earning regular income.

The MyPath Savings initiative targets economically disadvantaged youth participating in youth development and employment programs who are earning their first paycheck—a critical "teachable moment" to promote savings and connect youth with mainstream financial products. It offers a comprehensive suite of financial services, including just-in-time financial education and access to mainstream financial products, using a hands-on, experiential approach with an emphasis on peer learning and support. It also incorporates behavioral economics principles to minimize barriers and incentivize savings.

MyPath Savings builds on Margaret Sherraden's financial capability framework which suggests that financial capability is both individual and structural. At the individual level, people need financial knowledge in order to make sound financial decisions, but they must also have access to the broader systems that facilitate positive financial behaviors, including income-generating employment and access to beneficial financial products and services and asset-building mechanisms. It is only when financial literacy (the *ability* to act) and financial inclusion (the *opportunity* to act) are coupled together does one develop financial capability, taking positive financial actions toward financial stability and well-being (Sherraden 2013).

Mixed Evidence from Financial Education Research

A number of studies have attempted to evaluate the impact of financial education on a variety of outcomes, and while the general consensus is that financial education should have a positive effect, the findings across programs are mixed (Lyons et al. 2006). Certain research finds that financial education can lead to positive knowledge, attitude, and behavior change. For example, the National Endowment for Financial Education offers the High School Financial Planning Program, which was designed around the idea of performance-based learning, an educational approach that allows students to take what they learn and apply it directly in the course of each lesson. Studies find that students demonstrated a statistically significant increase on all financial knowledge, behavior, and confidence questions immediately after completing the program, and these knowledge gains were demonstrated again three months after completion of the curriculum (Boyce and Danes 1998; Danes 2005). Similarly, Varcoe, Martin, Devitto, and Go (2005) report that participation in the Money Talks for Teens series led to increased financial knowledge and self-reported positive financial behaviors, such as increases in comparison shopping and waiting until items went on sale. In contrast, Gartner and Todd (2005) analyzed results from the St. Paul Foundation's Credit Card Project, which assesses the impact of online credit card education on cardholder behavior among first-year college students, and find no significant difference in behavior change between the treatment and comparison groups.

Developing Financial Capability among Youth

In recent years, there has been a growing emphasis on promoting financial capability among youth. In explaining why they feel that "financial literacy is a helpful but not sufficient idea," Johnson and Sherraden (2007) suggest that:

> Participation in economic life should maximize life chances and enable people to lead fulfilling lives. This requires knowledge and competencies, ability to act on that knowledge, and opportunity to act. This is more likely when people are able to convert knowledge into action. This, in our view, includes linking individual functioning to social institutions, and pedagogical methods that enable them to practice and gain competency in this functioning. We refer to this as financial capability (122).

Unlike financial education efforts, which focus primarily on the transfer of knowledge, financial capability initiatives couple knowledge building with access to financial products and services so that participants can transform knowledge into behavior change (Sherraden 2013). This approach underscores the importance of emphasizing financial capability as a developmental, rather than remedial, activity. As evidenced in other fields, such as health, investing in prevention is more efficient than treating negative outcomes (Cohen and Henderson 1991). The approach should be similar when it comes to financial health. Providing young people with the knowledge, skills, and opportunity to establish healthy financial futures is far preferable to having to provide credit repair or debt management services later on in their lives.

Another reason to emphasize the development of financial capability among youth is the opportunity to take advantage of the teachable moments that occur during the transition into early adulthood (National Endowment for Financial Education 2003). During this time, many youth make their first financial decisions, such as acquiring a credit card or preparing to pay for college. Additionally, a number of young people have their first experiences with employment and the process of managing their paychecks. According to the Bureau of Labor Statistics, an estimated 34% of youth ages 16–19, and approximately 55% of youth ages 16–24, were part of the labor force in early 2012 (Toossi 2013). Since a sizable share of the youth and young adult population is working, this is an opportune time to engage with mainstream financial institutions and develop a habit of savings. Traditional employer-based financial education has been associated with higher levels of retirement saving among working adults, and the effect appears to be particularly strong for non-highly compensated employees (Bayer, Bernheim, and Scholz 2009). However, much of the literature on workplace financial education focuses on working adults, rather than youth and young adults. Increased savings have been shown to improve an individual's opportunity for upward economic mobility and establishing positive savings behaviors early in life can thus be particularly advantageous for youth from lower-income households (Cramer et al. 2009). This period is thus a critical life stage as youth are just beginning their independent financial lives.

However, studies continue to show that teens lack financial knowledge. The Jump$tart Coalition has been surveying teens across the nation since 1997 and reports consistently poor performance on a test of financial knowledge. Separately, the National Longitudinal Survey of Youth suggests that there is a widespread lack of financial knowledge among youth (Lusardi, Mitchell, and Curto 2010). In addition, recent concerns about student loan defaults and burdensome debt loads suggest that many young adults do not fully understand the nature of the financial decisions they are making with regards to paying for their education, or they may understand the implications of such borrowing but otherwise lack the financial means necessary to pay for college.

Most importantly, without access to mainstream financial services, low-income youth and young adults face greater challenges in achieving financial stability and utilizing wealth-building tools. In general, young adults are more likely to be unbanked or underbanked relative to older adults. Roughly one third (30.8%) of households under 24 are underbanked compared to 17.7% of households between the ages of 55 and 64, and 11.6% among households age 65 or older (Burhouse and Osaki 2012). Similarly, 15.7% of households under 24 are unbanked, compared to 5.6% of households between the ages of 55 and 64, and 3.5% among households age 65 or older (Burhouse et al. 2014).

To address this issue, a growing number of initiatives are focusing more intentionally on financial capability. These programs offer financial education paired with a savings account in a mainstream financial institution so that participants can apply financial concepts and increase their familiarity with financial institutions. One example is the "bank at school" initiative that provides elementary school-aged youth with classroom-based financial education and the opportunity to open savings accounts and make deposits at school. Such programs have taken shape in Illinois, Delaware, Virginia, Tennessee, Louisiana, and Wisconsin. In addition, programs such as I Can Save (ICS) have reported promising results using a financial capability model. Children who participated in ICS, which provided financial education, savings accounts, and matches, scored significantly higher on financial fitness tests than comparison groups, regardless of parent education and income (Sherraden et al. 2011).

A final consideration in building financial capability is the challenging nature of behavior change. Despite having financial knowledge and access to financial products, many people still struggle to implement positive financial behaviors. The field of behavioral economics suggests that certain design principles, such as automatic enrollment and the establishment of defaults, can influence the adoption of desired behaviors (Thaler and Sunstein 2009).

In summary, the literature suggests that building youth financial capability requires both the development of financial knowledge and the opportunity to develop good financial behaviors through access to financial products. In addition, behavioral economics suggests that key design principles can help increase the take-up of positive financial behaviors. While there is a shift in emphasis from financial literacy to financial capability, with a concomitant growth in financial capability programs of all kinds, it is acknowledged that we still know very little about whether such programs work, what works, and if and how these programs affect financial behavior (e.g., Yoong et al. 2013).

This evaluation research contributes to the literature by demonstrating the results of MyPath Savings, a financial capability pilot project aimed at underserved youth who are earning employment income, that provides financial education, access to a savings account in the youth's own name (without a parent co-signer), and behavioral economics design features. Specifically, the research seeks to understand whether the MyPath Savings initiative results in changes in financial knowledge, attitudes, and self-efficacy, as well as behavioral changes related to saving, budgeting, and meeting a financial goal. In addition, it seeks to understand participants' perceptions of different aspects of the program design.

THE MYPATH SAVINGS MODEL

The MyPath Savings financial capability initiative was developed and piloted by MyPath (formerly Mission SF Community Financial Center) from October 2011 to April 2012. A nationally recognized San Francisco–based nonprofit, MyPath positions low-income youth and young adults to take control of their finances and achieve economic mobility. Their MyPath Savings initiative is a comprehensive suite of financial services that helps economically disadvantaged youth develop healthy financial habits and behaviors, using a hands-on, experiential approach, with an emphasis on peer learning and support.

While the research findings on the outcomes of financial education programs have been mixed, programs that have been found to be effective are those which: are targeted and narrowly focused (Klinge, Harper, and Vaziri 1974); demonstrate relevance, engage participants' motivation, and capitalize on teachable moments (Hathaway and Khatiwada 2008; McCormick 2008); engage participants with real-world financial products and services (Land and Russell 1996; McCormick 2008); and leverage incentives and principles from behavioral economics (Hernandez 2011). In addition, the youth development literature indicates that effective youth development programs provide opportunities for skill building, incorporate practices that support empowerment and autonomy, and offer opportunities to form supportive relationships and to experience belonging and acceptance into a group (Committee on Community-Level Programs for Youth 2002). Building upon the findings from the research literature, and on the financial capability framework that emphasizes both knowledge development and access to the financial mainstream, MyPath Savings incorporates the following four principles in the program design: (1) timely, relevant, peer-developed intervention for youth workers; (2) engagement with mainstream financial products and services; (3) leveraging the principles of behavioral economics; and (4) employing best practices in youth development. These principles are discussed in detail below.

Timely, Relevant, Peer-developed Intervention for Youth Workers

At a symposium organized by the National Endowment for Financial Education, a panel of 14 prominent representatives from media, financial education, financial services, business, and government recognized that people are most receptive to financial education when the information meets an immediate need, and that timing the financial education efforts to these teachable moments is an important factor in increasing motivation and success (National Endowment for Financial Education 2003). Similarly, Kezar and Yang (2010) note that timing financial education to coincide with teachable moments is important for producing positive learning outcomes, as students are better prepared and motivated to address financial issues during these critical moments. A review of empirical studies evaluating the effectiveness of various financial education programs also found that those targeted toward specific financial activities, such as homeownership or credit card counseling, and those that are offered just before the corresponding financial event (e.g., the purchase of a home) were more effective than programs aimed at a general audience with no specified financial activity, such as financial education programs in high schools or at work places (Fernandes, Lynch, and Netemeyer 2014; Hathaway and Khatiwada 2008). The importance of this just-in-time education is underscored by Lewis Mandell, regarded as one of the founders of the modern financial literacy movement, who was quoted in explaining the lack of effectiveness of the mainstream financial literacy paradigm, that "Financial education doesn't work when it's given in advance of when the consumer needs it" (Olen 2014).

MyPath Savings is layered on existing youth development and employment programs and specifically focuses on participants who are receiving their first paychecks. The program capitalizes on this teachable moment by imparting just-in-time and relevant money management knowledge and skills to prepare youth to manage their new income stream wisely through three 90-minute financial education workshops. The workshops were conducted approximately two months apart over a six-month period. The topics covered included financial goal setting; budgeting and expense tracking; the power of compound interest; and an overview of the different types of financial institutions and products—topics that are relevant to participants' immediate needs at each stage of the program. In addition, a team of youth helped develop the MyPath Savings financial education curriculum to tailor the language and examples to maximize the program's relevance for youth and ensure that the curriculum is meeting their most pertinent needs. The financial education lessons are facilitated at each participating site by a team of youth leaders that have received extensive training. Youth are involved in every aspect of MyPath, from content development and lesson delivery to peer encouragement for achieving savings goals. Peer-based models for financial education are promising (DeMarco, Mills, and Ciurea 2008; Jackson, Sher, and Wood 2000) as peer influences are important factors in the development of positive financial behaviors among the young (Committee on Community-Level Programs for Youth 2002; Graubard and Korn 1996).

Engagement with Mainstream Financial Products and Services

Alongside the need for timely and relevant financial content, the literature suggests that effective financial education programs involve participants in active learning by providing opportunities to practice and apply the lessons learned (Kezar and Yang 2010; Parrish and Servon 2006). Research also suggests that when people have access to mainstream saving structures, such as savings accounts, pension plans, and IRAs, they are more likely to save at higher rates than those who lack such access (Sherraden, Schreiner, and Beverly 2003). Other studies suggest that the use of mainstream banking is associated with positive financial behavior while negative financial behavior increased when mainstream banking was not used (National Endowment for Financial Education 2004). As a consequence, it is increasingly being advocated that financial education be offered in conjunction with a mainstream financial product, such as a savings account, to increase relevance and improve financial outcomes (McCormick 2008; Parrish and Servon 2006).

In close partnership with Self-Help Federal Credit Union, MyPath Savings engages youth with mainstream financial products to provide them with the opportunity to act on the new financial knowledge they have acquired, preventing the use of costly alternative financial services and helping to develop a habit of saving. This partnership with the credit union allows the youth to be sole owners of their savings accounts, without their parents as co-signatories. Youth participants thus learn to manage their accounts in a real-world setting, accessing their money via online banking, ATMs, and in-person transactions, putting into practice the concepts learned through MyPath Savings. In addition, youth have the opportunity to engage with additional financial products at the end of the program cycle, such as Certificates of Deposit. The opportunity to access and engage the financial mainstream is a critical component of developing one's financial capabilities (Jacob, Hudson, and Bush 2000) and financial education programs that engage participants with real-world products and applications are recognized as being promising (Land and Russell 1996; McCormick 2008).

Leveraging the Principles of Behavioral Economics

Research from the field of behavioral economics suggests that desired behaviors can be encouraged by minimizing barriers, deliberately establishing reasonable defaults, and incorporating meaningful incentives (Bertrand, Mullainathan, and Shafir 2004; Thaler and Sunstein

2009). These principles are key components of the MyPath Savings program, which is designed to encourage youth to open accounts and save.

Hassle factors—the seemingly innocuous small inconveniences or cost for acting, actually have an outsized impact on one's actions (Choi, Laibson, and Madrian 2004; Madrian and Shea 2001). As such, innovations in financial services need to consider how to reduce the hassle factors to make it as simple and easy as possible for people to follow-through on their intentions (Daminger et al. 2014). MyPath Savings removes or minimizes any factors that participants may perceive as "hassles" in the account set-up process. For example, the paperwork for opening a savings account at the partner credit union is simplified and included in the enrollment package for the youth employment program; thus, even before the youth have begun to participate in the employment program (and thus MyPath Savings), they have already completed the account opening paperwork. In addition, parents are not required to co-sign the accounts. The accounts are also endowed with the $5 minimum deposit requirement needed for account opening. Youth therefore do not need to visit the financial institution and stand in line, or come up with the minimum deposits, to open their accounts.

Setting and achieving a savings goal is emphasized in MyPath Savings. Each youth participant develops a personal short- to medium-term savings goal at the beginning of MyPath Savings, with peer and session activities organized around supporting goal attainment. To facilitate the achievement of their savings goals, every youth establishes direct deposit instructions for a portion of their pay to be automatically deposited into their MyPath Savings account every pay period as part of their "savings contract." The instructions are shared with the respective payroll departments in order to arrange for the appropriate amounts to be deposited at each pay period. Technical assistance is provided to participating agencies to support the direct deposit arrangements where needed. Youth are also given the option to vary the deposit amounts by completing a very simple and short form. Facilitation in the form of direct deposits have been associated with better savings outcomes, such as having a higher likelihood of being a saver (Schreiner, Clancy, and Sherraden 2002) and higher frequency of saving (Grinstein-Weiss, Curley, and Charles 2007).

A number of incentives and nudges are incorporated into the program to promote youth savings. Youth enjoy a 2-to-1 savings match for deposits into their MyPath Savings account, capped at the first $30 saved for their first four paychecks. In addition, prizes are offered to reward youth engagement, attainment of financial behavioral benchmarks, or the achievement of savings goals. Prize-linked savings have been found to encourage savings across different LMI individuals (Kearney et al. 2010).

Employing Best Practices in Youth Development

Promising youth development programs provide youth with opportunities for skill building, incorporate practices that support empowerment and autonomy, and offer youth opportunities to form supportive relationships and to experience belonging and acceptance into a group (Committee on Community-Level Programs for Youth 2002). MyPath Saving's design incorporates these key elements. Being peer-developed and -delivered, MyPath Savings provides youth with the opportunity to exercise autonomy and build various leadership and communication skills in the development and delivery of the financial education curriculum. Youth also exercise autonomy when they set their own personal savings goal amount and purpose, unlike other youth financial capability programs where the goals and purposes are pre-determined. In addition, through the use of social media and group-based activities and contests, youth participants build supportive relationships with each other and provide accountability for meeting their goals.

In 2011–2012, MyPath, in partnership with Self-Help Federal Credit Union, piloted MyPath Savings by delivering its suite of services to all 10 agencies participating in San Francisco's largest youth employment program, the Mayor's Youth Employment and Education Program (MYEEP). MYEEP targets low-income youth and youth facing particular barriers to employment. It provides leadership and employment training to mainly 9th and 10th graders and links them with supported job placements in nonprofit organizations, for-profit businesses, and the public sector. MYEEP supports youth as they transition to adulthood with an emphasis on the connection between employment and education. As the MyPath Savings pilot is layered on MYEEP, all participants of MYEEP were also concurrently participants of the MyPath Savings pilot.

METHODS

Procedures

A mixed-methods design was implemented for the outcome evaluation. For the quantitative component, a single group pre-post design was adopted. Participants' financial attitudes and behaviors were surveyed at the beginning of the MyPath Savings initiative and again at the end, using structured self-administered questionnaires. In addition, participants' financial knowledge was assessed using self-administered evaluation forms immediately before and after each financial education session. As for the qualitative component of the evaluation, three focus groups were carried out near the conclusion of the program to collect data on participants' perceptions and insights about the different aspects of MyPath Savings. Selected focus group questions are listed in Appendix 1. The focus group sessions were audio recorded, and a thematic analysis of the content was conducted.

This article reports on the findings of the quantitative component of the larger outcome evaluation. While the qualitative findings are not the focus of this article, comments from focus group participants are judiciously provided when they add depth and additional insight to the survey results. Administrative data were also used to obtain participants' sociodemographic information, as well as information on savings and asset accumulation. As the savings data were collected based on administrative rather than actual account transactional data, data on possible withdrawals as well as potential additional deposits were not captured.

Key Measures

Sociodemographic Measures

Ethnicity. Information about ethnicity was obtained from administrative data, and categorized into African American, Latino, Asian, and Other, which include those who self-identify as being multiracial/multiethnic, European American, or Arab.

Household Income. Participant's household income was obtained from administrative data, and was measured as an ordinal variable in $5,000 increments, beginning from "$0–5,000" to "Over $45,000" as the last level. For the purpose of analysis, this variable was recoded into five levels, in increments of $10,000, ranging from "$0–10,000" to "Greater than $40,000" per annum.

Public Benefits Receipt. Participants indicated whether their households were receiving any government assistance, and the types of assistance they were receiving, on their enrollment forms. Examples of public benefits included TANF, MediCal, SSI, and Food Stamps. A dichotomous variable was created to reflect participant's public benefits receipt status. Participants are coded as "1" if their family received any form of government assistance.

Programmatic Measures

Participants were asked to provide their assessment of the financial education component of MyPath Savings by indicating the extent to which they found the individual financial education sessions to be (1) relevant; (2) interesting; and (3) the extent to which they felt they learned from the sessions. The items were measured on a 3-point Likert scale, where 1 is "Not at all"; 2 is "Somewhat" and 3 indicates "Very".

Financial Knowledge Measure

Participants' level of financial knowledge was assessed using financial quizzes that were created for the purpose of this study. The multiple choice and true–false items on the quizzes test participants' understanding of the content covered in each of the three financial education sessions. Examples of the quiz items include "What is the minimum amount of money you should try to set aside as your emergency fund?" and "If you have $300,000 in your account and your financial institution gets destroyed in a fire, your money will all be safe and returned to you. True/False."

Financial Attitudes and Financial Self-Efficacy Measures

Financial self-efficacy refers to one's belief and self-confidence in their ability to deal effectively in financial situations (Lown 2011; The Social Research Centre 2011). There is a growing body of literature that suggests financial self-efficacy may moderate the development of financial capability (Danes and Haberman 2007; Lapp 2010). Participants were asked, on a 4-point Likert scale, how sure are they that they can effectively do each of the following in a responsible manner during their lifetimes—(1) use credit, (2) invest their money, (3) budget their money, (4) spend their money, and (5) save their money. The options are "1. Not sure at all"; "2. Not very sure"; "3. Somewhat sure"; and "4. Very sure." These items were adapted from the 2010 Junior Achievement / Allstate Foundation "Teens and Personal Finance" survey (Junior Achievement 2010). A financial self-efficacy index was created for the purpose of analysis by summing participants' scores across all five items. The Cronbach's alpha for this scale is .76.

Financial attitudes were measured by the extent to which participants agreed with the following statements on a 5-point Likert scale (1 "Strongly Disagree"—5 "Strongly Agree"). The items are "I am in control of my money"; "I am comfortable doing business with a bank or credit union"; "I feel confident about making decisions that deal with money"; and "I think it is 'cool' to be able to manage my money well." The first three items were adapted from an evaluation of the Money Smart Curriculum

(Federal Deposit Insurance Corporation 2007). The last item was used in evaluations of earlier iterations of the MyPath Savings initiative, and was included to allow for continuity and comparison across iterations.

Financial Behaviors Measure

Participants were asked how often they carry out four financial behaviors that are relevant to their life stage on a 4-point Likert scale, from “1” indicating “Never” to “4” indicating “All the time.” The four financial behaviors MyPath Savings seeks to develop in youth include: tracking expenses; using personal budgets; checking needs vs. wants before making purchases, and saving a portion of one’s income.

For the purpose of analysis, the scores on these four items were summed to create an index to measure the extent to which participants have adopted these financial behaviors. The items were adapted from the Personal Finance Skills and Behavior Scale, which through a factor analysis, concluded that the items could be grouped as behaviors related to “general personal finance management” (Harder + Company 2009).

Savings Measure

Savings information was collected from administrative data. At the first financial education session, participants developed their savings goal and established their direct-deposit instructions. At each pay period, the amounts of participants’ pay to be diverted and deposited into youth’s savings accounts were recorded by the agency. The amount of incentives that each participant earned was also recorded. These administrative records were analyzed to measure participants’ savings performance.

Participants

The sample for this study consists of all 275 youth who participated in MYEEP across 10 sites from October 2011 to April 2012. Of the valid responses, 31% lived in households with annual incomes of $10,000 or less and 49% came from households with annual incomes between $10,001 and $30,000. In addition, over 86% of youth were from households that had annual incomes below half of San Francisco’s median household income of $71,304 (U.S. Census Bureau n.d.). In terms of public benefits, over 58% of youth came from households that were receiving some form of government assistance and public benefits, such as TANF or MediCal.

The ages of participants ranged from 14 to 18 years, with the mean age being approximately 15 years old. Approximately 94% of participants were in the 9th or 10th grade when they enrolled in the program. The majority of participants were Asian (50%), while 30% were African American, 10% Latino, and another 10% identified themselves as being multiracial or other (White, Arab, Pacific Islander). In terms of gender, approximately 59% of participants were female. Around 60% of respondents indicated that they did not have any savings account, and 76% had not received any financial education or budgeting classes before.

There was about a 10% attrition rate in MYEEP, with 28 participants dropping out of the program. Those who dropped out of MYEEP were similar to program completers in terms of household income ($\chi^2(4) = 1.48$, n.s.), gender ($\chi^2(1) = 3.3$, n.s.), and household receipt of public benefits ($\chi^2(1) = .86$, n.s.). However, program completers and noncompleters differed significantly by ethnicity ($\chi^2(3) = 1.48, p < .01$), with far fewer Asian participants dropping out of the program compared to the other ethnic groups (Table 1).

RESULTS

Appropriateness of Financial Workshops to Targeted Youth

The appropriateness of the financial education was assessed by three variables, viz., the extent to which youth found the various workshops to be relevant, to be interesting, and the extent to which they felt they learned from the workshops. Overall, respondents found the financial education workshops to be very appropriate, with workshops having between 93% and 99% of respondents reporting that they were somewhat to very relevant; between 90% and 98% finding the various workshops to be somewhat to very interesting; and between 96% and 99% of respondents reporting that they learned a little to a lot from the workshops (Figure 1).

Participants' perceptions of the relevance of the workshops, their level of interest in the topics, and their perceptions of how much they learned from the workshops were combined into a single measure of the overall appropriateness of each financial workshop. Participants, on a 3-point scale, generally found that workshops on the benefits of saving (mean = 2.7, $SD = .38$), budgeting (mean = 2.5, $SD = .41$) and goal setting (mean = 2.5, $SD = .44$) to be most appropriate to their life stage and current developmental needs. This was followed by the workshops on providing information on managing their savings account (mean = 2.4, $SD = .46$), the different types of financial institutions (mean = 2.4, $SD = .46$), the power of compound

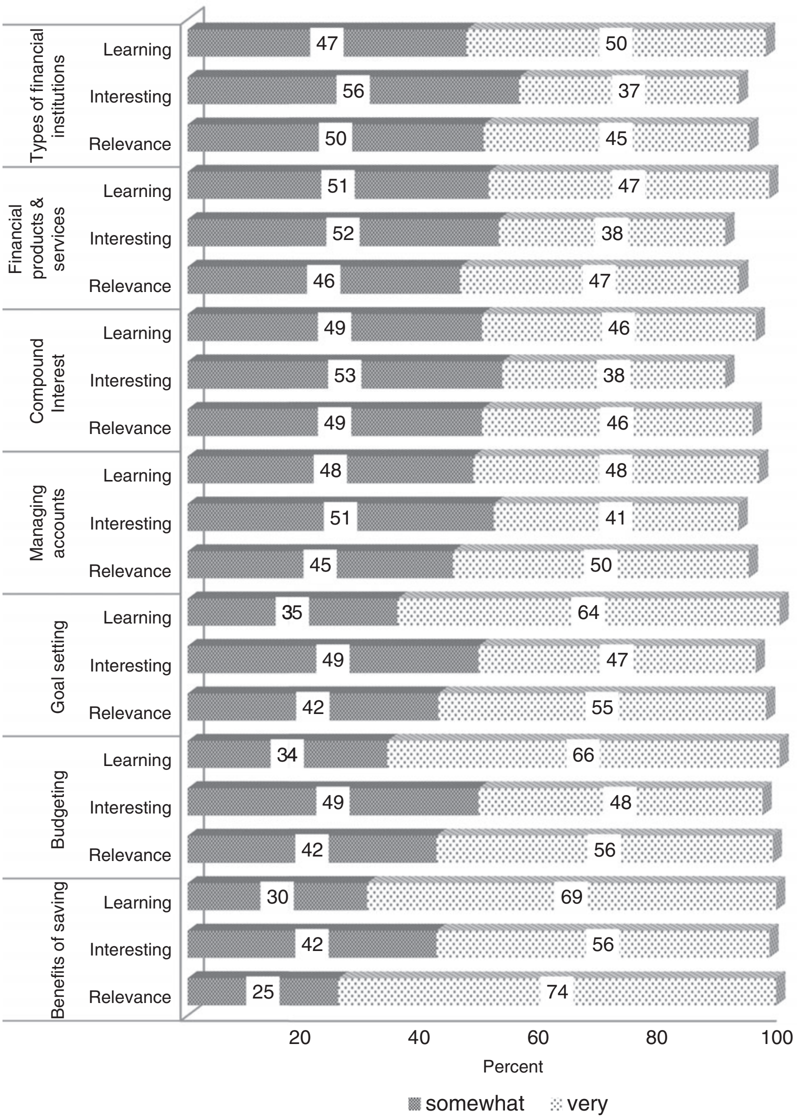
TABLE 1
Sample Characteristics, Savings, and Total Accumulation

	Percent ($N = 275$)	Net Savings ($) Mean (SD)	Total Accumulation ($) Mean (SD)
Gender			
Male	41	498 (343)	726 (364)
Female	59	512 (307)	739 (333)
Race/Ethnicity			
African American	30	333 (161)	534 (208)
Latino	10	484 (202)	718 (234)
Asian	50	601 (372)	842 (382)
Other (White, Arab, Multiracial)	10	534 (237)	758 (272)
Grade level			
9th	43	513 (297)	739 (322)
10th	52	496 (344)	723 (367)
11th	3	642 (245)	877 (273)
12th	2	516 (281)	759 (290)
Household annual income			
≤$10,000	27	442 (342)	640 (398)
$10,001 to $20,000	28	469 (339)	679 (390)
$20,001 to $30,000	16	494 (361)	705 (414)
$30,001 to $40,000	11	504 (337)	738 (358)
>$40,000	8	526 (364)	735 (418)
Missing	12	308 (269)	469 (355)
Household receiving public benefits			
Yes	58	479 (310)	699 (343)
No	42	547 (334)	785 (343)
Program completion status			
Completed program	90	507 (321)	734 (345)
Dropped out of program	10	4 (17)	4 (17)

interest (mean = 2.4, $SD = .48$), and the workshop on the different types of financial products and services (mean = 2.4, $SD = .50$).

The different financial education workshops were perceived to be similarly appropriate regardless of participants' household public benefits receipt, with the exception of the session on the power of compound interest. Participants from households who received public benefits (mean = 2.5, $SD = .46$) perceived that workshop to be more appropriate for them compared to those from households that were not receiving public benefits (mean = 2.3, $SD = .50$; $t(165) = -2.37$, $p < .05$). No significant differences were observed across the various financial education workshops by household income, gender, or by ethnicity.

FIGURE 1
Proportion of Participants Reporting Appropriateness of Financial Education by Workshop



Financial Knowledge

Youth in MyPath Savings experienced increases in their financial knowledge as a result of the workshops. Data from the pre- and post-workshop assessments indicate significant increases in the number of items that respondents were able to correctly answer at the end of each workshop. The most significant gains were seen for the first training session that focused on financial goal setting and budgeting. Before that session, participants were able to correctly answer, on average, 43% ($SD = 18.8$) of the items on the financial knowledge quiz for that session correctly ($n = 168$). At the end of that session, participants ($n = 232$) correctly answered on average 62% ($SD = 24.4$) of the items. For the 153 participants whose pre- and post-session data could be matched, there was a significant improvement of 24 percentage points ($t(153) = 14.69$, $p < .001$).

A significant 8 percentage point improvement ($t(172) = 6.05$, $p < .001$) in financial knowledge was also observed, using paired samples t-test analysis, in session two which focused on the benefits of savings, account management, and the power of compound interest. Prior to the session, participants ($n = 188$) correctly answered just under 50% ($SD = 18.2$) of the questions on the financial knowledge quiz for that session. This increased to an average of 57% ($SD = 19.7$, $n = 185$) for those who completed the quiz at the end of the session.

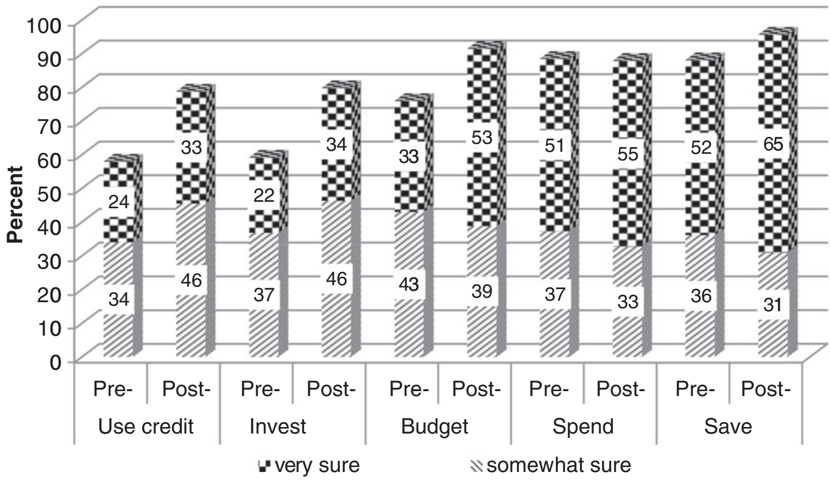
A significant 8 percentage point improvement in financial knowledge scores for training session three that covered the different types of financial institutions, products, and services was also noted through a paired samples t-test analysis ($t(118) = 3.26$, $p < .01$). Before the training, participants ($n = 169$) answered 35% ($SD = 23.5$) of the items correctly on average. This increased to 43% ($SD = 25.1$, $n = 167$) at the end of the session.

While the data indicate a significant increase in financial knowledge as a result of the financial education workshops, the results also suggest that there is room for improvement, in particular for the third training session where respondents were able to answer fewer than half of the items correctly. Owing to implementation issues that prevented the data from being matched across training sessions, or to other demographic and administrative data, more detailed analyses and comparisons were not possible.

Financial Attitudes and Financial Self-Efficacy

Participants in MyPath Savings expressed a higher level of confidence in their ability to effectively carry out a variety of financial tasks at the end of the initiative compared to before their participation in the program (Figure 2). Youth have the highest confidence in their ability to save (96% responded that they were somewhat sure or very sure), budget (92% were somewhat sure or very sure), and spend their money (88% were somewhat sure or very sure). On the other hand, they were least confident about their ability to effectively use credit, with 79% of respondents expressing that

FIGURE 2
Confidence in Effectively Carrying Out Financial Tasks

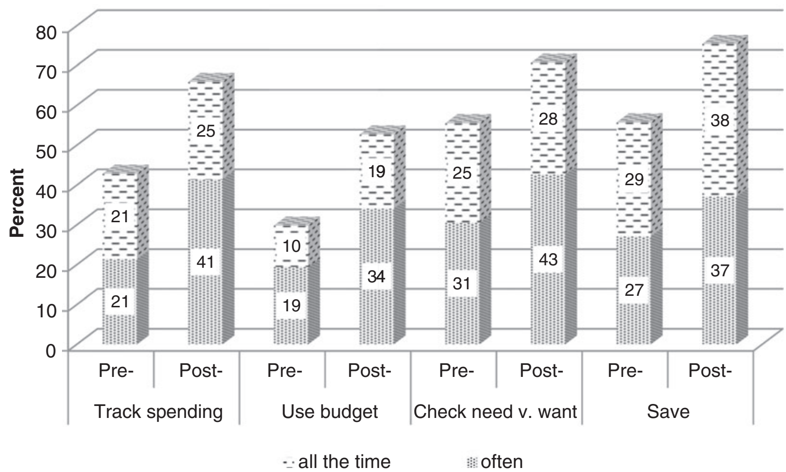


they felt somewhat to very sure about carrying out this task effectively. The results compare very favorably against a national sample of 1,000 teens that found 54% to be unsure (not sure at all/not very sure) about the use of credit; 45% to be unsure about investing money; 25% unsure about budgeting; 18% unsure about spending money responsibly; and 11% reported that they were unsure about saving their money (Junior Achievement 2010).

Combining these items as a measure of financial self-efficacy, the results of a paired sample *t*-test indicate that participants' perceived financial self-efficacy significantly increased ($t(129) = 4.98$, $p < .001$) from a mean of 2.99 ($SD = .63$) on a 4-point scale at the beginning of the program, to a mean of 3.30 ($SD = .50$) by the end of the program. Further comparisons of the mean change in financial self-efficacy, using one-way ANOVAs and independent samples *t*-tests, indicate that participants experienced similar increases in financial self-efficacy over the course of the program, regardless of ethnicity ($F(3, 125) = 2.01$, n.s.), gender ($t(128) = -.92$, n.s.), household income ($F(4, 121) = .49$, n.s.), and public benefits receipt ($t(128) = -1.53$, n.s.).

A positive shift in financial attitudes was also observed in participants. About 82% of youth ($n = 166$) also somewhat agree or strongly agree with the statement that they felt confident about making decisions that deal with money at the end of the initiative, a significant increase from their status at the start of MyPath Savings as indicated by a sign-test analysis

FIGURE 3
Frequencies of Positive Financial Behaviors



($Z = -4.77$, $p < .001$). Sign-test analyses further indicated that participants experienced a significant increase in the level of agreement with the statement that they felt comfortable doing business with a bank or credit union ($Z = -3.56$, $p < .001$), with 67% of participants ($n = 167$) somewhat or strongly agreeing with the statement at the end of the program. In addition, by the end of the program, 81% of participants ($n = 167$) somewhat agree or strongly agree that they thought it was "cool to be able to manage" their money well, again significantly different than at the beginning of the program ($Z = -2.5$, $p < .05$). Lastly, more youth also somewhat or strongly agree that they are in control of their money (88.5%, $n = 165$), again, significantly higher than their preprogram status ($Z = -2.08$, $p < .05$).

Financial Behaviors

Respondents reported significant increases in the frequency with which they practiced positive financial behaviors as a result of MyPath Savings. At the end of MyPath Savings, 75% of youth ($n = 167$) reported that they either often save a portion of their income or that they save all the time, while 71% asked themselves whether an item was a need or a want before making a purchase often or all the time. In addition, 66% of youth reported that they track their spending often or all the time, and 54% reported that they use a budget often or all the time (Figure 3).

Summing these four behaviors into a single index of financial behaviors, and comparing the means between the beginning and the end of the program using paired samples *t*-test, the results indicate that there was a significant increase in the frequencies to which these financial behaviors were carried out by the end of MyPath Savings ($t(129) = 6.73$, $p < .001$). This increase in the occurrence of positive financial behaviors did not differ significantly across gender ($t(128) = .63$, n.s.), public benefits receipt ($t(128) = .73$, n.s.), household income ($F(4, 121) = .38$, n.s.), or ethnicity ($F(3, 125) = 1.13$, n.s.).

Account Ownership and Savings

Every MyPath Savings participant had a savings account opened in their name as part of the model. For 60% of these youth, this account was the first savings account that they owned. At the end of the six-month period, a total of $180,569 had been accumulated in the savings accounts of the 246 youth who remained in MYEEP. On average, each youth had accumulated $734 (*SD* = 345; min = 0, max = 1,794; median = 670), and saved $507 (*SD* = 321.2; min = 0, max = 1,544; median = 440) net of savings matches and the initial deposit. Youth also saved 86% of their goal, on average. Additionally, 46% of youth fully met their savings goal, while another 3 in 10 youth attained between 80% and 99% of their goal.

The amount of savings and assets accumulated through MyPath Savings did not differ significantly by gender ($t(244) = .74$, n.s.), receipt of public benefits ($t(244) = 1.66$, n.s.), or by household income ($F(4, 215) = .42$, n.s.). However, the data indicate that the mean amount saved by participants differed significantly by ethnicity ($F(3, 241) = 12.49$, $p < .001$). African American youth (mean = $333, *SD* = 160.7) saved significantly lower amounts compared to youth who self-identified as being Asian (mean = $600, *SD* = 372.1) or Other (mean = $534, *SD* = 321.4). Youth who self-identified as being Latino had statistically similar levels of savings (mean = $484, *SD* = 202.3) compared to youth from the different ethnic backgrounds.

DISCUSSION

This evaluation research sets out to test whether the MyPath Savings initiative, a short-term and targeted program built around the financial capability framework of empowering participants with the ability to act through financial education, as well as the opportunity to act by providing access to mainstream financial institutions and products, results in positive changes in financial knowledge, attitudes, and self-efficacy, and financial behaviors. The results suggest MyPath Savings may be effective in increasing the financial capabilities of vulnerable youth, helping them establish good financial practices and save as they enter adulthood. Through this initiative, youth participants' knowledge of various financial topics significantly increased after each financial education workshop, as measured by their scores on pre- and post-test assessments. At the end of MyPath Savings, participants also expressed a higher level of financial self-efficacy and confidence in their ability to effectively carry out a variety of financial tasks, and reported significant increases in the frequency in which they practiced positive financial behaviors. Their level of confidence about making financial decisions also significantly increased by the end of MyPath Savings, as did their level of comfort in doing business with a mainstream financial institution. In other words, MyPath Savings participants experienced both an increase in knowledge and an increase in the application of that knowledge. MyPath Savings therefore not only developed financial knowledge but the financial capability of its participants.

Additionally, MyPath Savings demonstrates that even economically disadvantaged youth can save significantly meaningful amounts when provided with structural supports. In the focus groups, many youth reported that they were saving by themselves for the first time as a result of MyPath Savings. Youth were also surprised by the amounts they were able to save by the end of the initiative. Reflecting on the results, one participant explained:

> I never wanted to save money, I always wasted it. But now I can keep it in the account, and I do not have to worry about my brother asking to borrow my money and not paying me back. It was a good way for me to save my money and actually at the end, I feel proud of myself, it was worth all the effort and wait that I put into it.

More importantly, the gains in financial capability as a result of MyPath Savings were observed to be mostly independent of gender, ethnicity, household income, and whether or not the household was receiving some form of public benefits or social welfare. This suggests that MyPath Savings is generally effective in increasing the financial capabilities of youth, even those who are among the most economically disadvantaged.

The findings add to the growing body of literature that finds that financial capability programs such as MyPath Savings that are targeted, narrowly focused, and capitalize on teachable moments; engage participants with real-world financial products and services; and leverage behavioral economics principles, to be promising models. While the design of this evaluation does not permit the examination of the effects of the individual components of MyPath Savings, it is plausible that the success of MyPath Savings could be attributed in part to building the program around teachable moments as well as providing real-world structural supports for youth to save—the two components of the financial capability framework.

Building Around "Teachable Moments"

Consistent with literature that finds financial education programs that provide just-in-time education to be effective (Fernandes, Lynch, and Netemeyer 2014; Hathaway and Khatiwada 2008; Thaler 2013), the positive outcomes of the pilot could be attributed in part to the fact that MyPath Savings is built around key teachable moments, thereby ensuring relevance and engagement. For example, as many of the youth in MyPath Savings are receiving their first paychecks and managing their income for the first time, MyPath Savings focuses on equipping participants with the knowledge and skills needed to successfully set financial goals, budget, save, and manage their newly acquired incomes. In addition, youth are also connected to a mainstream financial institution, another promising practice (McCormick 2008), many for the first time. MyPath Savings builds on this teachable moment and introduces various financial products as well as information on how to navigate different financial services. In so doing, MyPath Savings places an emphasis on enabling youth to understand *why* financial literacy and capability is important to the participant in the present, and to his or her future. This in turn increases the youth's motivation, which has been found to be an important driver of financial literacy (Mandell and Klein 2007).

In addition to building around teachable moments, the MyPath Savings financial education curriculum incorporates the input of past youth participants. This could have further ensured that the program addresses immediate needs and that the materials are developmentally appropriate for youth participants. Also, having youth peer-trainers lead the sessions, rather than adult teachers, further increases the level of youth engagement. Feedback gathered from focus groups indicated that participants were able to relate better to the peer trainers who were having the same life experiences. In addition, the peer trainers served as role models for the participants. This is consistent with the social learning theory which suggests that people may learn best from others that are perceived as being similar to them, and whom they could model after (Fabiano 1994; Goetz et al. 2011; Sloan and Zimmer 1993).

Structural Supports Help Economically Disadvantaged Youth Save

MyPath Savings demonstrates that youth from economically disadvantaged households can save when provided with the necessary structures and supports. Roughly 86% of the youth participants in the MyPath Savings pilot came from households with annual incomes below 50% of San Francisco's median household income and over 58% came from households that were receiving some form of government assistance. In spite of their economic disadvantage, participants were able to save $507 on average over a 6-month period. This compares to an average of $138 saved over the same period by youth at one of the program partner sites of the Savings for Education, Entrepreneurship and Downpayment (SEED) research initiative, who were of similar ages and backgrounds (Mason et al. 2009). Having all participants open savings accounts in their names at a financial institution, as well as the use of direct deposits, match caps, financial incentives, and peer support may have contributed to the higher savings performance seen in MyPath Savings as compared to other financial capability programs.

Ownership of Savings Accounts

Among the key features of MyPath Savings that support and facilitate savings is the opening of a savings account for every participant in their own name (accounts were held at Self-Help Federal Credit Union). The opening of the savings accounts is important on several fronts. First, it provides the infrastructure that facilitates and encourages youth to save regularly. Second, it connects youth to the financial mainstream. In the 2011–2012 MyPath Savings pilot, 60% of participants reported they did not own a bank account prior to MyPath Savings. Third, it provides another teachable moment to empower youth to establish and manage their relationship with a financial institution and product. One youth explained the importance of owning their own account, saying:

> I have a bank account, but it's in my mom's name, so I can't even cash a check or take out money without my mom there. So it [the MyPath account] was a safe place to keep the money I earned and make a deposit or do whatever I needed.

Direct Deposit

In contrast to research that found no associations between direct deposits and the amounts saved (Han and Sherraden 2009; Sherraden, Schreiner, and Beverly 2003), savings seem to have been facilitated in MyPath Savings by the direct deposit feature which allows participants to automatically deposit a specified portion of their paycheck into their MyPath Savings account at each pay period. Unlike in other programs, where the direct deposit feature is optional, every youth in MyPath Savings determines the amount they would like to direct deposit at each pay period during one of the earlier financial education workshops, providing yet another teachable moment. Many participants highlighted that MyPath Savings enabled them to save for the first time and that the automatic direct deposit feature was critical in supporting and sustaining their ability to save. One participant explained, "I really liked auto deposit. It would have been way too much work to save without it." Another youth said, "I wish I could have gone back and adjusted my [direct deposit] amount so I could have saved even more."

Savings Incentives and Match Caps

Incentives and the match cap also played a big role in encouraging savings. In MyPath Savings, participants are provided a 2-to-1 savings match on the first $30 saved for their first four deposits of the initiative. Incentives are also provided to encourage engagement and various positive financial behaviors. The savings data indicate that most participants used the match cap as their savings target, consistent with findings from the American Dream Demonstration (Sherraden, Schreiner, and Beverly 2003). In addition, participants reported that the 2-to-1 savings match was instrumental in their decision to start, and continue, saving. While the generous match rate helped spur youths' decision to save, participants reported in the focus groups that they would have preferred having a higher match cap, and having the savings matches available for longer periods, to further encourage the establishment of the savings habit. In fact, youth in various focus groups reported that savings match rates of 0.5-to-1 or 1-to-1 would have been just as effective, if the match cap were raised and matches made available for longer periods.

Peer Support

Support by fellow participants, peer leaders, and agency staff have also been credited by participants in the focus groups as being an important factor in encouraging savings. Youth in MyPath Savings freely shared their savings goals as well as their progress toward achieving their goals with each other in their group meetings. This provided peer leaders and agency staff the opportunity to mentor and encourage youth regarding their financial practices, but more importantly, it established a peer accountability structure where youth were accountable to each other for meeting their savings goals. In addition, high-saving youth served as role models to motivate others to save more. By the end of the pilot, youth were truly surprised by the amounts they had saved. Youth who saved less than others, or did not save, reported feeling disappointed in themselves, having seen how others with the same opportunities managed to save, which left them feeling committed to making smarter financial decisions to save in the future. The importance of peer support for saving was also evident in the research from the American Dream Demonstration, which found savings to be significantly associated with the presence of peer mentoring groups, suggesting that peer encouragement, support, and sharing of the challenges and experiences are helpful in increasing financial capabilities and savings (Curley 2004; Sherraden and McBride 2010; Sherraden, McBride, and Hanson 2005).

LIMITATIONS

As with all research, there are limitations to the findings and the generalizability of the findings of this evaluation. In terms of research design, a single group pre-post was adopted for this outcome evaluation due to financial and implementation constraints. As a result, numerous threats to internal validity—for example history, selection, and maturation—could not be excluded as viable explanations for the results. Second, as this pilot implementation of MyPath Savings was intended to be a "proof of concept," the evaluation adopted a "black box" approach to test the effectiveness of the program as a whole, but not the program theories behind each of the components within MyPath Savings. While the results indicate that MyPath Savings works in increasing financial capability among youth, it is not known which components of the program had the greatest impact, or whether the components had any effect at all. Third, due to resource constraints that prevented program monitoring across all 10 sites, the level of youth participation in MyPath Savings, and how participation influenced the outcomes, are not known. Fourth, the ethnic composition of the participants was not reflective of San Francisco's ethnic diversity, with half being of Asian descent and another 30% African American. The disproportionality, especially the over-representation of Asians, may have biased the results, thereby limiting its validity and generalizability. Future research should consider adopting more rigorous experimental designs to test both the effects of the overall program, as well as the effects of the individual components of the program.

CONCLUSION

The landscape of youth financial capability initiatives is sparse, including those targeting high school–aged youth and transitional-aged youth (i.e., youth making the transition from high school into adulthood, ages 18–25 years). There is enormous potential in helping youth, specifically low-income youth, build their financial capabilities before they make the transition into adulthood. This study provides an overview of the process and early outcomes of the MyPath Savings financial capability pilot that has a dual focus on enabling participants to act through increased financial knowledge, and the opportunity to act through access to mainstream financial products and services. As these early results suggest, there is significant potential to reach working-age low-income youth with experiential financial education and account management within the broader context of youth development, and positively impacting their financial capability outcomes. While this pilot was relatively small and geographically focused, the concept provides a useful framework for similar efforts across the country. One of the program participants captured the very essence of MyPath Savings in saying,

> Instead of kids always asking their parents for money, you worked for this money, you're being able to save this money for yourself. Now that we can earn our own money, I think kids should be proud of themselves for being able to save.

APPENDIX 1

SELECTED MEASURES

FINANCIAL SELF-EFFICACY

How sure are you that you can effectively do each of the following in a responsible manner during your lifetime? (4-point Likert scale—1 "Not Sure At All" to 4 "Very Sure")

a. Use credit
b. Invest your money
c. Budget your money
d. Spend your money
e. Save your money

FINANCIAL ATTITUDES

Please let us know the extent you agree with the following statements. (5-point Likert scale—1 "Strongly disagree" to 5 "Strongly Agree")

a. I am in control of my money
b. I am comfortable doing business with a bank or credit union
c. I feel confident about making decisions that deal with money
d. I think it is "cool" to be able to manage my money well

FINANCIAL BEHAVIORS

How often do you? (4-point Likert scale—1 “Never” to 4 “All the time”)

a. Track how you spend your money
b. Use a personal budget to plan how you spend your money
c. Ask yourself if it is a need or a want before making a purchase
d. Save a portion of your income

SELECTED FOCUS GROUP QUESTIONS

a. What are your thoughts on the savings goal?
b. Which of the savings incentives had the biggest impact on you and why?
c. What could we do differently to encourage you to save more?
d. What are your thoughts of having youths teach the sessions, compared to having adults?
e. How has MyPath impacted you?

REFERENCES

Bayer, Patrick J., B. Douglas Bernheim, and John Karl Scholz. 2009. The Effects of Financial Education in the Workplace: Evidence from a Survey of Employers. *Economic Inquiry*, 47 (4): 605–624.

Bertrand, Marianne, Sendhil Mullainathan, and Eldar Shafir. 2004. A Behavioral-Economics View of Poverty. *The American Economic Review*, 94 (2): 419–423.

Boyce, Laurie and Sharon M. Danes. 1998. *Evaluation of the NEFE High School Financial Planning Program 1997–1998*. Greenwood Village, CO: National Endowment for Financial Education.

Burhouse, Susan, Karyen Chu, Ryan Goodstein, Joyce Northwood, Yazmin Osaki, and Dhruv Sharma. 2014. *2013 FDIC National Survey of Unbanked and Underbanked Households*. Washington, DC: Federal Deposit Insurance Corporation.

Burhouse, Susan and Yazmin Osaki. 2012. *2011 FDIC National Survey of Unbanked and Underbanked Households*. Washington, DC: Federal Deposit Insurance Corporation.

Choi, Janes J., David Laibson, and Brigitte C. Madrian. 2004. Plan Design and 401(K) Savings Outcomes. *National Tax Journal*, 52 (2): 275–298.

Cohen, David R. and John B. Henderson. 1991. *Health, Prevention and Economics*. Oxford, UK: Oxford University Press.

Committee on Community-Level Programs for Youth. 2002. Features of Positive Development Settings. In *Community Programs to Promote Youth Development*, edited by Jacquelynne Eccles and Jennifer Appleton Gootman. Washington, DC: National Academies Press.

Cramer, Reid, Rourke O’Brien, Daniel Cooper, and Maria Luengo-Prado. 2009. *A Penny Saved Is Mobility Earned: Advancing Economic Mobility through Savings*. Washington, DC: Pew Charitable Trusts.

Curley, Jami. 2004. *The Role of Institutions in the Saving Participation and Performance of Low-Income Households in Individual Development Accounts*. Dissertation, George Warren Brown School of Social Work, Washington University in St Louis, St. Louis, MO.

Daminger, Allison, Katy Davis, Piyush Tantia, and Josh Wright. 2014. *Driving Positive Innovations to Scale in the Financial Services Sector*. New York: ideas42.

Danes, Sharon. 2005. *Evaluation of the NEFE-High School Financial Planning Program 2003–2004*. St Paul, MN: University of Minnesota, Family Social Science Department.

Danes, Sharon M. and Heather R. Haberman. 2007. Teen Financial Knowledge, Self-Efficacy, and Behavior: A Gendered View. *Journal of Financial Counseling and Planning*, 18 (2): 48–60.

DeMarco, Donna, Gregory Mills, and Michelle Ciurea. 2008. *Assets for Independence Act Evaluation: Process Study: Final Report*. Cambridge, MA: Abt Associates Inc.

Executive Order 13646, 78 FR 39159. 2013.

Fabiano, Patricia M. 1994. From Personal Health into Community Action: Another Step Forward in Peer Health Education. *Journal of American College Health*, 43: 115–121.

Federal Deposit Insurance Corporation. 2007. *A Longitudinal Evaluation of the Intermediate-Term Impact of the Money Smart Financial Education Curriculum Upon Consumer's Behavior and Confidence*. Washington, DC: Author.

Fernandes, Daniel, John G. Lynch, and Richard G. Netemeyer. 2014. Financial Literacy, Financial Education, and Downstream Financial Behaviors. *Management Science*, 60 (8): 1861–1883.

Gartner, Kimberly and Richard M. Todd. 2005. *Effectiveness of Online "Early Intervention" Financial Education for Credit Cardholders*. Washington, DC: Federal Reserve System Community Affairs Research Conference (April).

Goetz, Joseph W., Dorothy B. Durband, Ryan E. Halley, and Kimberlee Davis. 2011. A Peer-Based Financial Planning & Education Service Program: An Innovative Pedagogic Approach. *Journal of College Teaching & Learning*, 8 (4): 7–14.

Graubard, Barry I. and Edward L. Korn. 1996. Survey Inference for Subpopulations. *American Journal of Epidemiology*, 144 (1): 102–106.

Grinstein-Weiss, M., Jami Curley, and Pajarita Charles. 2007. Asset Building in Rural Communities: The Experience of Individual Development Accounts. *Rural Sociology*, 72 (1): 25–46.

Han, Chang-Keun and Michael Sherraden. 2009. Do Institutions Really Matter for Saving among Low-Income Households? A Comparative Approach. *The Journal of Socio-Economics*, 38 (3): 475–483.

Harder + Company. 2009. *Junior Achievement Presents: The NEFE High School Financial Planning Program*. Boston: JA Worldwide.

Hathaway, Ian, and Sameer Khatiwada. 2008. *Do Financial Education Programs Work?* Working Paper 08-03. Cleveland, OH: Federal Reserve Bank of Cleveland.

Hernandez, Mindy. 2011. *Applying Behavioral Research to Asset-Building Initiatives: Lessons from a Year of Experimentation*. Washington DC: CFED.

Jackson, Kristina M., Kenneth J. Sher, and Phillip K. Wood. 2000. Trajectories of Concurrent Substance Use Disorders: A Developmental, Typological Approach to Comorbidity. *Alcoholism: Clinical and Experiment Research*, 24 (6): 902–913.

Jacob, Katy, Sharyl Hudson, and Malcolm Bush. 2000. *Tools for Survival: An Analysis of Financial Literacy Programs for Lower-Income Families*. Chicago, IL: Woodstock Institute.

Johnson, Lissa and Margaret Sherrard Sherraden. 2007. From Financial Literacy to Financial Capability among Youth. *Journal of Sociology & Social Welfare*, 34 (3): 119–146.

Junior Achievement. 2010. *Junior Achievement/The Allstate Foundation 2010 Teens and Personal Finance Survey*. Washington, D.C.: Junior Achievement.

Kearney, Melissa Schettini, Peter Tufano, Jonathan Guryan, and Erik Hurst. 2010. *Making Savers Winners: An Overview of Prize-Linked Savings Products*. Cambridge, MA: National Bureau of Economic Research.

Kezar, Adrianna and Hannah Yang. 2010. The Importance of Financial Literacy. *About Campus*, 14 (6): 15–21.

Klinge, Valerie, Sharon Harper, and Habib Vaziri. 1974. The Peabody Individual Achievement Test. *Journal of Abnormal Child Psychology*, 2 (2): 133–141.

Land, Kenneth C. and Stephen T. Russell. 1996. Wealth Accumulation across the Adult Life Course: Stability and Change in Sociodemographic Covariate Structures of Net Worth Data in the Survey of Income and Program Participation, 1984–1991. *Social Science Research*, 25 (4): 423–462.

Lapp, William M. 2010. The Missing Link: Financial Self-Efficacy's Critical Role in Financial Capability. EARN White Paper. San Francisco, CA: EARN Research Institute.

Lown, Jean M. 2011. 2011 Outstanding AFCPE Conference Paper: Development and Validation of a Financial Self-Efficacy Scale. *Journal of Financial Counseling and Planning*, 22 (2): 54–63.

Lusardi, A., Olivia S. Mitchell, and Vilsa Curto. 2010. Financial Literacy among the Young. *Journal of Consumer Affairs*, 44 (2): 358–380.

Lyons, Angela C., Lance Palmer, Koralalage S.U. Jajaratne, and Erik Scherpf. 2006. Are We Making the Grade? A National Overview of Financial Education and Program Evaluation. *Journal of Consumer Affairs*, 40 (2): 208–235.

Madrian, Brigitte C. and Dennis F. Shea. 2001. The Power of Suggestion: Inertia in 401(K) Participation and Savings Behavior. *The Quarterly Journal of Economics*, 116 (4): 1149–1187.

Mandell, Lewis and Linda Schmid Klein. 2007. Motivation and Financial Literacy. *Financial Services Review*, 16: 105–116.

Mason, Lisa Reyes, Yunju Nam, Margaret Clancy, Vernon Loke, and Young-Mi Kim. 2009. *SEED Account Monitoring Research: Participants, Savings and Accumulation*. CSD Research Report 09-05. St. Louis, MO: Washington University, Center for Social Development.

McCormick, Martha Henn. 2008. The Effectiveness of Youth Financial Education: A Review of the Literature. *Journal of Financial Counseling and Planning*, 20 (1): 70–83.

National Endowment for Financial Education. 2003. Financial Literacy in America: Individual Choices, National Consequences. A White Paper Report on "The State of Financial Literacy in America-Evolutions and Revolutions," Denver, CO, October 9–11, 2002. Washington, DC: National Endowment for Financial Education.

———. 2004. *Motivating Americans to Develop Constructive Financial Behaviors*. Denver, CO: National Endowment for Financial Education.

Olen, Helaine. 2014. The Quest to Improve America's Financial Literacy Is Both a Failure and a Sham. *Pacific Standard*, January 7.

Parrish, Leslie and Lisa Servon. 2006. Policy Options to Improve Financial Education: Equipping Families for Their Financial Futures *(Issue Brief)*. Washington, DC: New America Foundation.

Schreiner, Mark, Margaret Clancy, and Michael Sherraden. 2002. *Saving Performance in the American Dream Demonstration – A National Demonstration of Individual Development Accounts*. St. Louis, MO: Center for Social Development.

Sherraden, Margaret. 2013. Building Blocks of Financial Capability. In *Financial Capability and Asset Development – Research, Education, Policy, and Practice*, edited by Julie Birkenmaier, Margaret Sherraden, and Jami Curley (1–73). New York: Oxford University Press.

Sherraden, Margaret Sherrard and Amanda Moore McBride. 2010. *Striving to Save: Creating Policies for Financial Security of Low-Income Families*. Ann Arbor: University of Michigan Press.

Sherraden, Michael, Mark Schreiner, and Sondra Beverly. 2003. Income, Institutions, and Saving Performance in Individual Development Accounts. *Economic Development Quarterly*, 17 (1): 95–112.

Sherraden, Margaret Sherrard, Amanda Moore McBride, Elizabeth Johnson, Stacie Hanson, Fred M. Ssewamala, and Trina R. Shanks. 2005. *Saving in Low-Income Households: Evidence from Interviews with Participants in the American Dream Demonstration*. St. Louis, MO: Washington University in St Louis, Center for Social Development.

Sherraden, Margaret Sherrard, Lissa Johnson, Baorong Guo, and William Elliott. 2011. Financial Capability in Children: Effects of Participation in a School-Based Financial Education and Savings Program. *Journal of Family & Economic Issues*, 32 (3): 385–399.

Sloan, Beverlie Conant and Christine G. Zimmer. 1993. The Power of Peer Health Education. *Journal of American College Health*, 41: 241–245.

Thaler, Richard H. 2013. Financial Literacy, Beyond the Classroom. *The New York Times*, October 6.

Thaler, Richard H. and Cass R. Sunstein. 2009. *Nudge: Improving Decisions About Health, Wealth, and Happiness*. New York: Penguin.

The Social Research Centre. 2011. *Adult Financial Literacy in Australia: Executive Summary of the Results from the 2011 ANZ Survey*. Victoria, Australia: ANZ.

Toossi, Mitra. 2013. *Labor Force Projections to 2022: The Labor Force Participation Rate Continues to Fall*. Washington, DC: Bureau of Labor Statistics.

U.S. Census Bureau. n.d. State & County Quickfacts: San Francisco (City), California. http://quickfacts.census.gov/qfd/states/06/0667000.html.

Varcoe, Karen P., Allen Martin, Zana Devitto, and Charles Go. 2005. Using a Financial Education Curriculum for Teens. *Journal of Financial Counseling and Planning*, 16 (1): 63–71.

Yoong, Joanne K., Kata Mihaly, Sebastian Bauhoff, Lila Rabinovich, Angela A. Hung, and Elaine Kempson. 2013. *A Toolkit for the Evaluation of Financial Capability Programs in Low- and Middle-Income Countries*. Washington, DC: International Bank for Reconstruction and Development/The World Bank.