

# Boston Saves Evaluation: Year 1

## Early Outcomes from the Parent/Guardian Survey

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## Executive Summary

This report describes findings from the first year of a three-year evaluation of Boston Saves, a children's savings account program offered by the City of Boston through the Mayor's Office of Workforce Development (OWD) in partnership with Boston Public Schools (BPS). Boston Saves automatically provides each student enrolled in kindergarten (K2) in BPS a children's savings account (CSA) including an initial deposit of \$50 from the City of Boston and ongoing opportunities to receive incentives. The money in this account can be used for college or job training expenses after the student finishes high school.

Aligning with core objectives and commitments in the BPS strategic vision and building on extensive prior empirical work, this program is hypothesized to increase family savings for future education; family understanding of financial capability concepts; student social and emotional development; parent expectations for post-secondary education or training; student academic performance and attainment; parent financial empowerment; and community perception that saving for future education is important.

This report summarizes outcomes from a parent survey administered in 2021 (the second year of full program implementation) to N=514 families representing 81 elementary schools serving K2 students, including N=272 respondents in a treatment group that received a CSA because their child was enrolled in K2 during the first year of program implementation at their school and N=242 respondents in a comparison group that did not receive a CSA because their child was enrolled in K2 during the year prior to program implementation at their school. Boston Saves and Boston Public Schools administered the survey to parents throughout the summer/fall of 2021.

Below, we highlight some initial findings showing early positive outcomes for Boston Saves participants compared to non-eligible comparison families on key short-term metrics:

- **Social-Emotional Development:** We found a statistically significant and positive effect of Boston Saves on parent-reported social and emotional development of their child for economically disadvantaged families (Boston Saves M=2.15, Comparison M=1.85, 0-3 scale;  $\beta=0.30$ ,  $p=0.01$ ,  $d=0.41$ ) but did not find an effect for economically advantaged families.
- **Reading Frequency:** We found a statistically significant and positive effect of Boston Saves on reading frequency (2 or more times per week) for economically advantaged families (Boston Saves M=86%, Comparison M=71%;  $\beta=0.15$ ,  $p=0.022$ ,  $d=0.41$ ) but did not find an effect for economically disadvantaged families.
- **Life Satisfaction:** We found a statistically significant and positive effect of Boston Saves on parent-reported life satisfaction for economically disadvantaged families (Boston Saves M=2.33, Comparison M=2.06, 0-3 scale;  $\beta=0.28$ ,  $p=0.033$ ,  $d=0.35$ ) but did not find an effect for economically advantaged families.
- **Parental Educational Expectations:** Parents were asked to think about both their aspirations—how far they hope their child would go in school if there were no barriers—and

expectations—how far they expect their child will go in school, given current circumstances. Nearly all parents/guardians (96%) reported that if there were no barriers, they would want their child to go to college and/or graduate school. With regard to expectations, we found a *marginally* significant and positive effect of Boston Saves on expectations for college for economically disadvantaged families (Boston Saves M=92%, Comparison M=82%;  $\beta=0.10$ ,  $p=0.069$ ,  $d=0.30$ ) but did not find an effect for economically advantaged families.

- **Financial Planning and Savings:** We found a *marginally* significant positive effect of Boston Saves on the percentage of families reporting that they are saving for their child's future education (Boston Saves M=59%, Comparison M=51%;  $\beta=0.08$ ,  $p=0.084$ ,  $d=0.16$ ). We also found a large effect of Boston Saves on the percentage of families reporting they have a personal budget, spending plan or financial plan for economically disadvantaged families (Boston Saves M=58%, Comparison M=33%;  $\beta=0.25$ ,  $p=0.002$ ,  $d=0.58$ ) but not economically advantaged families—closing nearly three quarters of the gap with economically advantaged families on this measure. We found a marginally significant positive effect on whether families have an automatic deposit for electronic transfer set up to put money away for a future use (savings) for economically disadvantaged families (Boston Saves M=50%, Comparison M=36%;  $\beta=0.14$ ,  $p=0.090$ ,  $d=0.28$ ), but no effect for economically advantaged families. Finally, nearly all economically advantaged families report having a savings account but only 71% of economically disadvantaged families in the comparison group report having a savings account. Boston Saves increased this number of 86% among economically disadvantaged families ( $\beta=0.15$ ,  $p=0.047$ ,  $d=0.35$ )—helping economically disadvantaged families close the gap with advantaged families in establishing a savings account.

In short, compared to non-eligible comparison participants, Boston Saves families reported greater levels of social-emotional development and reading frequency; both established predictors of future academic attainment though, in contrast to social-emotional development, effects were driven by the economically advantaged families in the case of reading frequency. Although sometimes not significant, we also find a pattern of effects to suggest that Boston Saves is starting to reduce gaps between economically advantaged and disadvantaged families in financial planning and savings behaviors. New information pointing toward a positive association of Boston Saves with parental life satisfaction is also notable. We did not detect early effects on measures of parental depression, parent self-report of overall health or parent-report of their child's health. Finally, as with many new CSA programs, program awareness and engagement are a challenge. Roughly 2 in 5 respondents with accounts were unaware of this opportunity, half of respondents had logged into their accounts, and 1 in 5 respondents linked their personal account to their Boston Saves account. It should be noted that during the pandemic, Boston Saves and BPS staff agreed that participation should be emphasized over savings, as many families were experiencing trauma.

Future work will aim to replicate and strengthen these findings through refined measures, obtaining a larger survey sample size, and improved program-to-family communications. To date, this study represents the most extensive research on a CSA program among school age children living in a large US City. Given this, we suggest it has implications not only for the City of Boston and the state of Massachusetts but for the CSA field more broadly.

## Introduction

The purpose of this evaluation is to assess the early impact of providing each student enrolled in Kindergarten (K2) with a Boston Saves children's savings account (CSA). Boston Saves is a citywide children's savings account program initiated in 2016 from the City's Office of Workforce Development (OWD). In collaboration with the Boston Public Schools (BPS), the program was intentionally designed to address needs and desires articulated by families and to foster a citywide culture of elevated expectations for the future. To meet its guiding principles of equity, accessibility and inclusion, [Boston Saves](#) employs an incremental approach to savings through Boston Saves Dollars, reinforcement via the Boston Saves Savings Center, and an atmosphere of support through family peer champions and school coordinators. After a three-year pilot, the 2019-2020 academic year marked the first year of full-scale implementation with roughly 3,800 K2 students enrolled.

## Background

In the United States, saving for college has never been more important. Government spending trends and the declining value of need-based financial aid have shifted more of the costs of a college education onto students and families (Quinerno, 2012). However, structures to support families' college saving are heavily skewed to favor higher-income families (U.S. Department of Treasury, 2009). While surveys suggest that low-income Americans strongly value education and even prioritize saving for their children's college (Sallie Mae, 2018), the existing account vehicles and, especially, incentives for doing so, are not designed to facilitate their success. As a result, families' ability to contribute to the financing of higher education is increasingly determinant of children's outcomes, which drives greater inequity in educational attainment (Pfeffer, 2016). Crucially, these forces undermine higher education as a pathway to upward mobility. In short, all families, but particularly more economically disadvantaged families, need access to financial vehicles to support asset accumulation for postsecondary education or training. As detailed in the next section, providing children's savings accounts (CSAs) early to all students and their families with incentivized contributions and activities, cements a financial pathway to college while also providing a host of educational benefits to children and their families.

### What is a CSA?

CSAs are asset-building vehicles that often incorporate specific incentives and explicit structures to encourage savings by disadvantaged youth and families that otherwise may not have equitable access to financial institutions and saving tools. While the design and implementation of CSA programs across the country vary substantially, they usually allow deposits from participating children, their parents and relatives, and third parties such as scholarship programs. Ideally, these deposits are leveraged with an initial deposit and matching funds or incentive activities. The intent is to provide low-income savers with meaningful incentives for saving and support for

building balances—activities that are already available to higher-income households through tax benefits.

CSA programs typically provide participants with account statements and financial education. Increasingly, they are also providing support to help children prepare for higher education in the form of college and career readiness activities and efforts to promote positive college expectations. Withdrawals from CSAs are normally permitted for higher education expenses after children turn 18.

### Why CSAs?

According to Prosperity Now (2022), as of the end of 2021, there were approximately 123 CSA programs serving 1.2 million children in more than 39 states. This is about a 32% increase from 2020 (Prosperity Now, 2022). The expansion of CSAs is not driven by their ability to help children pay for college, but rather by empirical evidence demonstrating their ability to complement efforts to reduce inequality in early education, facilitate college completion, and improve post-college financial health (for a review of this literature, see Elliott & Lewis 2018; Huang, Beverly, Clancy, Schreiner, & Sherraden, 2021). Correlational studies using national data sets have found that children who have savings set aside for college are more likely to attend and complete college (Elliott, 2013). A recent randomized experiment in Italy supports the correlational evidence, with findings that show a causal link between CSAs and college enrollment as well as performance while in college (Azzonlini et al., 2018).

### Interim Metrics

However, because CSAs are long-term investments often starting at a child's birth or upon entry into kindergarten, they do not fully come to fruition until a child reaches college age. Given this, many outcomes that programs are most interested in, such as college enrollment, cannot be measured until many years after the program is started. Therefore, identifying interim metrics that can provide some indication of whether the program is on course to reach its long-term goals is imperative (Elliott & Harrington, 2016).

The theoretical framework (or logic model) guiding Boston Saves is built on empirical study of key interim metrics. For example, a randomized experiment conducted by the Center for Social Development, SEED for Oklahoma Kids (SEED OK), has shown a causal link between CSAs and improved social-emotional well-being among children (Huang, Sherraden, Kim, & Clancy, 2014) and less maternal depression (Huang, Sherraden, & Purnell, 2014). Importantly, many of these findings are strongest among low-income families. Correlational studies using national data sets have found that children who have savings set aside for college have higher math scores (Elliott, 2009) and higher educational expectations (Elliott, Choi, Destin, & Kim, 2011). Two interim metrics in particular, educational expectations and reading proficiency, have garnered a strong body of supporting evidence and are discussed in greater detail below. We also describe life satisfaction, a new metric to the CSA field.

*Educational Expectations.* Parental and children's educational expectations have been identified as an important interim metric for evaluating the success of CSA programs (Elliott & Harrington,

2016). In line with the importance of educational expectations, the growth in CSAs over the last ten years has, in a significant way, been driven by previous research that shows a strong correlation between CSAs and children's educational expectations (Elliott, 2009; Elliott, 2013; Elliott & Beverly, 2011a; Elliott & Beverly, 2011b; Elliott, Chowa, & Loke, 2011; Elliott, Song, & Nam, 2013) and a causal relationship between CSAs and parental expectations (Kim, Sherraden, Huang, & Clancy, 2015).

Educational expectations are a proxy for college bound identity (Elliott, 2013), and the college bound identity framework sprung out of research on Identity Based Motivation (IBM) theory (Oyserman & Markus, 1990; Oyserman, 2001; 2007; Oyserman, Bybee, & Terry, 2006; Oyserman, Elmore, & Smith, 2012; Oyserman & Fryberg, 2006; Oyserman & James, 2008; 2011). This body of research suggests that IBM acts as mediator between CSAs and children's academic outcomes (Elliott et al., 2011; Oyserman, 2013). Therefore, a fundamental mechanism explaining CSA effects on children's academic outcomes is that school is experienced as identity-congruent (e.g., "people like me can succeed") and relevant to future goals (Elliott, Destin, & Friedline, 2011; Oyserman, 2013). Cementing a financial pathway and investment for college early via a CSA sets clear expectations for college enrollment early in kindergarten, including strategies for attaining education goals for both students (initiative and persistence in the face of difficulty) and parents (involvement in education and progress in school). These key components of IBM improve important self-regulatory outcomes for students (e.g., attendance, social-emotional development, college savings deposits) and parents (e.g., college savings outcomes, parental academic support, parental expectations, parental conversations about high school and beyond, planning for college) which in turn improve academic achievement and college success. Indeed, the impact of IBM on self-regulatory behaviors and academic outcomes has been rigorously tested (Oyserman, Bybee, & Terry, 2006).

*Reading Proficiency.* Children's reading proficiency is a particularly important outcome in the education field. Education research has long suggested that children who cannot read well by third grade have trouble using reading as a tool to do such things as their homework or to study for exams (Lloyd, 1978). Further, in a longitudinal study of nearly 4,000 students, Hernandez (2011) found that children who do not read proficiently by third grade are four times more likely to not graduate from high school than more proficient readers. In addition, research also links third grade reading to college attendance (Lesnick et al., 2010).

*Life Satisfaction.* The research team evaluating Boston Saves will also examine life satisfaction, a new metric to the CSA field. Life satisfaction is included because previous research has shown a link between life satisfaction and parental educational expectations, a key outcome variable in the CSA field (Jung et al., 2018). In this study the research team examined the relationship between participating in Boston Saves (i.e., savings for a child's future education) and the life satisfaction of the parent. More generally, theory and research support the idea that life satisfaction is an important construct for understanding psychological well-being and mental health.



## Program Description

Enrollment in Boston Saves is universal and automatic. To set families on the path to success, all students in K2 (BPS term for kindergarten/5-year old students) automatically receive a Boston Saves account, seeded with \$50 in Boston Saves Dollars. Boston Saves provides families regular and simple opportunities to earn additional Boston Saves dollars, including \$5 for quarterly savings of at least \$25 (\$20 annually) and \$5 for reading together for 20 minutes per day, 20 days per month, during any quarter (\$20 annually; 3<sup>rd</sup> grade and younger). Families record reading minutes in the Savings Center, a user portal for participants. These opportunities provide families an important chance to grow the account without saving their own dollars.

Families can also earn \$25 in Boston Saves Dollars when they link an account. This account, ideally opened for the expressed purpose of children's savings, can be a savings, checking, or 529 account at a bank or credit union. It can also be a custodial account opened through Boston Saves, eliminating the need for a social security number. Families then link this account to their Boston Saves account in the Savings Center, where they can track money they have contributed as well as Boston Saves Dollars they have earned. Empowering families to track their own savings, as well as regular updates and recognition of milestones from Boston Saves, reinforces savings behaviors.

In the first year, families have the potential to earn up to \$115 in Boston Saves Dollars alone, accruing a total of \$215 when including the \$25 quarterly contributions from the family. Each year thereafter over the course of the 13-year program, families can accrue up to \$140 annually for a total of \$1,715 by the time their child completes high school.

## Purpose

The purpose of this evaluation is to assess the impact of providing each student enrolled in kindergarten (K2) a child savings account (CSA). Findings presented here focus on describing associations with Boston Saves participation overall and whether these associations vary for students and their families who are economically disadvantaged. This report focuses on key interim outcomes of interest (listed below).

Key outcomes of interest:

- a. Students' socioemotional development
- b. Family expectations for post-secondary education or training
- c. Parent/child reading frequency
- d. Parent/guardian life satisfaction
- e. Parent/guardian depression
- f. Family savings patterns and perceptions of community savings for higher education
- g. Program awareness and participation

# Methods

## Sample

In total, all 81 elementary schools serving K2 students are currently participating in Boston Saves. Of the 81 schools, five started as part of Pilot Cohort 1 in SY 2017-18 (Conley Elementary, Harvard-Kent Elementary, McKay K-8, Otis Elementary, Roosevelt K-8), and six started as part of Pilot Cohort 2 in SY 2018-19 (Gardner Pilot, Haynes EEC, King K-8, Mattahunt Elementary, West Zone ELC, Winship Elementary). The remaining 70 began in SY 2019-20 as part of scaled Cohort 3. Analyses for each of these three cohorts center on the year in which they began implementing—comparing students and their families in the first implementation year at each school with children and families in the year preceding the K2 cohort (Table 1).

Boston Saves administered a web-based survey to parents of all students enrolled in K2 in the first implementation year (treatment) and the year prior (comparison) at each respective school in summer/fall of 2021 for Pilot Cohort 1 (Grade 4 treatment, Grade 5 comparison), Pilot Cohort 2 (Grade 3 treatment, Grade 4 comparison), and Scaled Cohort 3 (Grade 1 treatment, Grade 2 comparison). Parents/guardians of a total of 514 participants completed the survey. The research team successfully linked school administrative data for N = 399 cases. For the 399 survey respondents with linkable school administrative data, respondents represent 74 schools when enrolled in K2. Note that several schools are specialty schools with small enrollment or a very small number of eligible students which may explain lack of representation in the remaining 7 schools. Respondents included parents/guardians of 31 Pilot Cohort 1 students (16 treatment, 15 comparison); 18 Pilot Cohort 2 students (9 treatment, 9 comparison); and 465 Scaled Cohort 3 students (247 treatment, 218 comparison)—see Table 1.

**Table 1. Survey Responses by Cohort and Condition (N = 514)**

Cohort	Treatment	Comparison	Total
Pilot 1	16	15	31
Pilot 2	9	9	18
Scaled Implementation	247	218	465
<b>Total</b>	<b>272</b>	<b>242</b>	<b>514</b>

The research team used self-report data from the survey and school administrative data to assess baseline demographic characteristics. With regard to language, the vast majority of respondents completed the survey in English (76%), with a minority completing the survey in five other languages: Spanish (18%), Chinese (3%), Vietnamese (2%), Portuguese (<1%), and Arabic (<1%). Among the 500 parent/guardian respondents that provided race/ethnicity information on the survey, 40% are White, 34% are Hispanic/Latinx, 20% are Black, 13% are Asian, and 26% are Other. Among the 399 students with linkable BPS administrative data, 29% are White, 37% are Hispanic/Latinx, 18% are Black, 10% are Asian, and 6% are Other. In addition, 17% of

children had individual education plans (IEPs), 32% were English Learners (ELs), and 59% were economically disadvantaged.

Table 2 compares our survey, linked school administrative data, and data from [Boston Public Schools At A Glance 2020-2021](#). The two notable deviations are the survey respondents both by self-report and linked administrative data are more likely to be White and less likely to be Black compared to overall district numbers and the self-report of Other is notably greater than the linked school admin or BPS data. Representation of students with IEPs, who are English learners, and who are Economic Disadvantaged is fairly consistent across surveys with linked administrative data and reported demographics among enrolled students from BPS.

**Table 2. Baseline Characteristics by Data Source and Respondent.**

	Parent Survey*		BPS Child Administrative Data		BPS*
	Treatment	Comparison	Treatment	Comparison	All
Asian	14%	12%	12%	8%	9%
Black	21%	20%	19%	17%	32%
Hispanic	29%	40%	32%	44%	43%
White	42%	39%	30%	26%	15%
Other	23%	30%	7%	4%	2%
IEP	--	--	13%	22%	21%
English learner	--	--	29%	36%	30%
Economically disadvantaged	--	--	55%	66%	69%

\*Respondents were allowed to select more than one response option for Race; Hispanic was presented as a separate ethnicity question.

### Instrument and Procedure

Boston Saves administered a 33-item survey developed by the research team including relevant outcome measures (e.g., parent educational expectations for their children, parents’ assessment of their children’s social and emotional development, financial planning for postsecondary education, child/parent health, savings behaviors). The survey included items from other CSA evaluation studies (e.g., Elliott, Zheng, Sabol, & O’Brien, 2021; Kim et al., 2017; Zheng et al., 2020). In addition, the survey administered to parents/families of children in the treatment group included 16 questions addressing engagement with, and feedback on, the Boston Saves program. The survey was administered in 10 languages and each survey invitation was tailored to the preferred language of the participant, on record with Boston Public Schools. A copy of the English language version and consent form are included in the Appendix.

The Office of Workforce Development and the BPS program coordinator for Boston Saves worked with program liaisons at each participating school to administer a web-based survey to

parents/guardians of eligible children. The surveys were administered in summer/fall 2021 through email and text message containing a link to a Google form. Each of the 81 schools offered an incentive to participating parents/guardians—a \$100 Amazon gift card for one randomly selected respondent from each school.

The analyses draw on school administrative data for indicators for child economic disadvantage, race/ethnicity, IEP, and EL status. Economic disadvantage is a binary indicator from school administrative data based on participation in SNAP, TAFDC, DCF Foster Care, or Mass Health. All administrative and survey data were de-identified by Boston Public Schools prior to analysis.

### Analytic Plan

To examine differences between parents/guardians of children in the treatment and comparison groups, we conducted Ordinary Least Squares (OLS) regression models where each outcome is predicted first by the intercept and condition (0=comparison, 1=treatment). These models controlled for fixed effects of school, child characteristics (gender, race/ethnicity, IEP status, EL status, economic disadvantage status) and parent/guardian ethnicity. We used “dummy-covariate adjustment” to address missing covariate data. In short, missing data points were imputed with the sample average and we included a dummy indicator for missing data child or parent characteristics data. To assess robustness of findings, the research team conducted a series of models with varying specifications; they examined the effect of condition with no covariates and the effect of condition with student/parent covariates only (no school fixed effects). The findings presented in the results section focus on the model that includes all covariates and school fixed effects. For all outcomes, we used OLS linear models instead of nonlinear models (e.g., logit models) because linear models are simpler to estimate and interpret. They also typically yield unbiased estimates of the intervention impact and standard error estimates that are approximately correct even when the underlying data-generating process is nonlinear (Judkins & Porter, 2015). In addition, we the research team examine whether effects on each outcome vary for economically advantaged and disadvantaged students first by examining the interaction between treatment and the administrative data-derived economic advantage indicator; we also examined the effect condition within each subsample of economically advantaged and disadvantaged students. For the most part, we only interpret subsample analyses if the condition x economic disadvantage interaction coefficient is statistically significant. However, in cases where there is a strong theoretical and policy rationale to examine effects separately for economically advantaged and disadvantaged students, the research team interpreted the subsample analyses in the absence of a significant interaction and noted this in the presentation of results. Where helpful for interpreting findings, the study team also calculated an effect size measure using Cohen’s  $d$  (a standardized mean difference) by dividing the applicable model-based effect of condition by the pooled standard deviation for the sample.

## Results

Before assessing impacts on the outcomes of interest, the research team examined differences at baseline in characteristics between the treatment and comparison group respondents. It is always possible that parents/guardians who responded to the survey for the comparison group and the treatment group may differ systematically in ways that would affect interpretation of differences on the outcome measure between these two groups. What Works Clearinghouse (2022) evidence standards recommend using inverse-propensity weighting procedures when standardized mean differences exceed 0.25, simple covariate adjustment in impact models when standardized mean differences range from 0.05-0.25, and no adjustment is needed when standardized mean differences are less than 0.05. As shown in Table 3, no differences exceeded 0.25. All of the baseline variables were included in the impact models as detailed in the prior section following WWC guidance.

**Table 3. Baseline Characteristics of Respondents by Condition**

Child Characteristic	Treatment	Comparison	Total N	Standardized Mean Difference
School Admin Data				
Female	55%	48%	399	0.13
Asian	12%	8%	399	0.10
Black	19%	17%	399	0.05
Latinx/Hispanic	32%	44%	399	-0.24
White	30%	26%	399	0.09
Other race/ethnicity	7%	4%	399	0.11
IEP	13%	22%	399	-0.24
English learner	29%	36%	399	-0.14
Economically disadvantaged	55%	66%	399	-0.23
Survey Data				
Asian	14%	12%	500	0.07
Black	21%	20%	500	0.02
White	42%	39%	500	0.07
Other race/ethnicity	23%	30%	500	-0.16
Hispanic	29%	40%	504	-0.23

### Impact Analyses

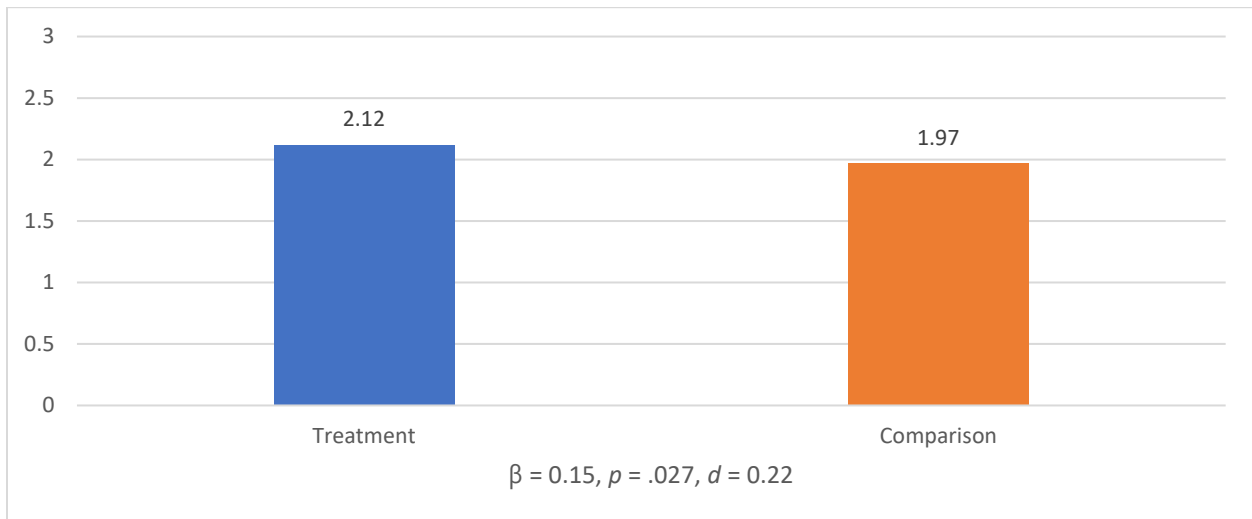
As highlighted under Analytic Approach, in sections that follow, we report the fully adjusted model-based effect of the treatment vs. comparison condition (i.e., adjusted for both parent and student baseline characteristics as well as school fixed effects). In the figure, we report the simple mean of the comparison group; the value for the treatment group is the simple mean of the comparison group plus the model-based estimate of the treatment group.

### Student’s Social-Emotional Development

Social and emotional development was assessed with an adapted version of the 20-item scale developed by American Institutes of Research.<sup>1</sup> Parents rate their child using response options 0-3 (rarely, occasionally, frequently, almost always) regarding how often statements are true for their child. Examples of items are “expresses feelings that are appropriate to the situation,” “responds with empathy to others who are upset,” or “takes responsibility for his/her own actions.”

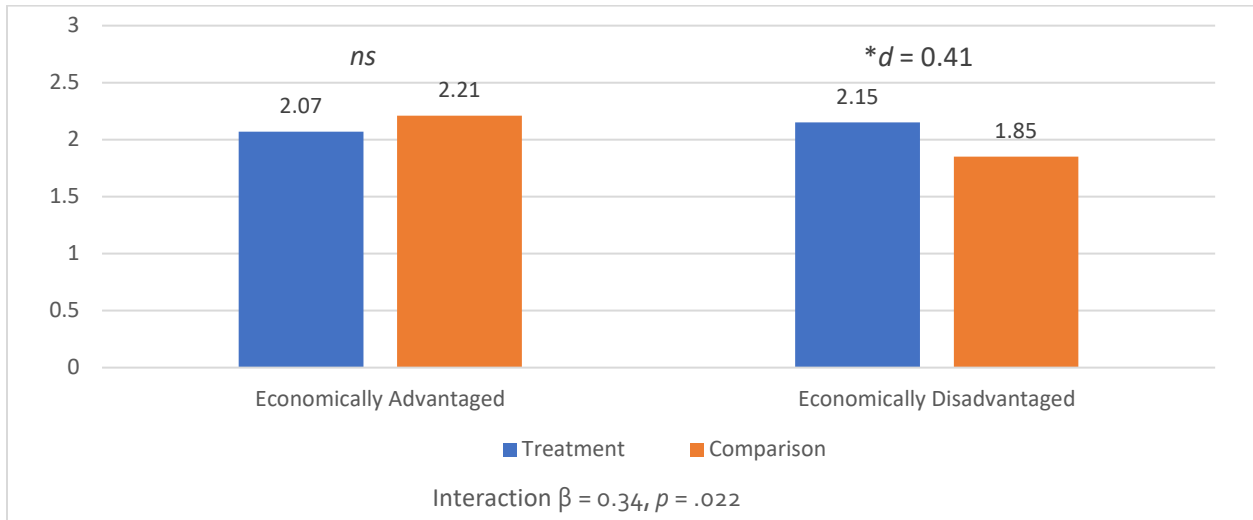
The scale reliability was high:  $\alpha = 0.97$ . For the overall sample, there was a positive and statistically significant effect of condition ( $\beta=0.15$ ,  $p = .027$ ,  $d = 0.22$ ) (see Figure 1a). The interaction of treatment with economic disadvantage was also statistically significant ( $\beta=0.34$ ,  $p = .022$ ) for the full sample. While the effect for the sub-sample of economically advantaged students was not statistically significant, among economically disadvantaged, the difference between treatment and comparison was significant ( $\beta = 0.30$ ,  $p < .05$ ) with a notable effect size of  $d = 0.41$  (Figure 1b). This indicates that the difference between treatment and comparison respondents on social-emotional development in the full sample was driven entirely by economically disadvantaged students.

**Figure 1a. Effect of Boston Saves on Parent-Reported Child Social-Emotional Development**



<sup>1</sup> Bailey, P. and Halloran, C. (2014, January). Psychometric Properties of the Teacher Rating of Grade 3 Students’ Social and Emotional Competencies. American Institutes of Research. Prepared for Collaborative for Academic, Social and Emotional Learning (CASEL).

**Figure 1b. Effect of Boston Saves on Parent-Reported Child Social-Emotional Development, by Economic Disadvantage Status**

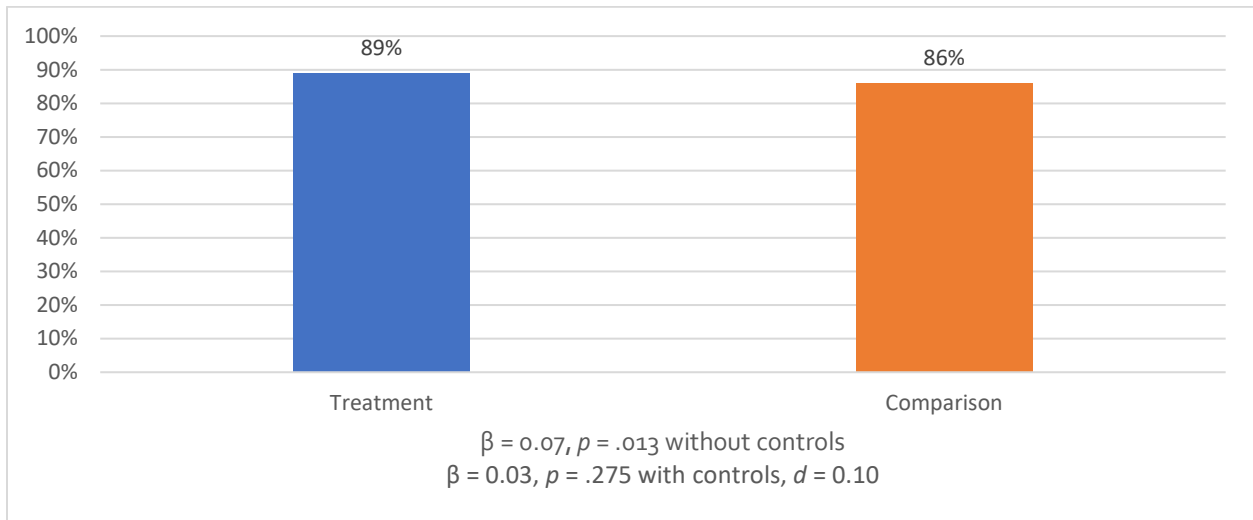


#### Parental Expectations for Attending College

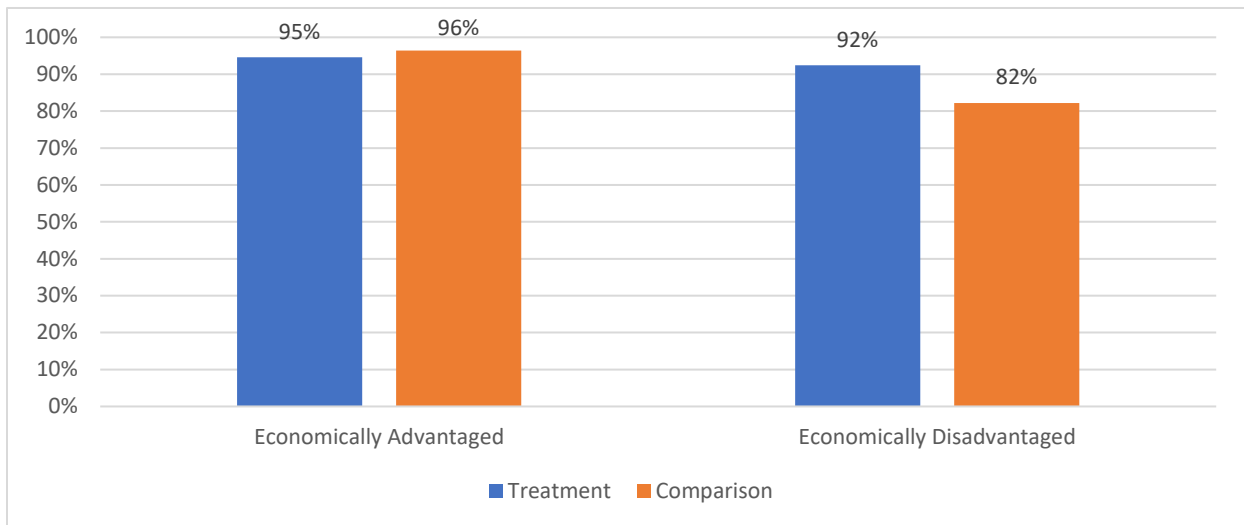
Parents were asked to think about both their aspirations—how far they hope their child would go in school if there were no barriers, and also how far they expect their child will go in school, given current circumstances. Nearly all parents/guardians (96%) reported that if there were no barriers, they would want their child to go to college and/or graduate school.

For analysis of parental educational expectations, we the research team create a binary indicator for whether parents/guardians expect their child to attend college or graduate school = 1 and all else = 0. As shown in Figure 2a, similar proportions of parents in the treatment and comparison conditions expect their child to attend college or higher. Indeed, when controlling for student/parent characteristics and school fixed effects, there is no significant effect of condition on parent expectations. ( $\beta=0.03, p = .275, d = 0.10$ ). However, although there is no significant condition by economic disadvantage status interaction on parent expectations (college or higher) and no significant main effect of condition, there is a marginally significant effect of condition for economically disadvantaged students ( $p = .069$ ) (Figure 2b). While it is atypical to analyze subsamples without an interaction, given the theoretical and policy relevance of this finding, it is important to highlight.

**Figure 2a. Effect of Boston Saves on Parent Expectations for College**



**Figure 2b. Effect of Boston Saves on Parent Expectations for College, by Economic Disadvantage Status**



### Reading Frequency

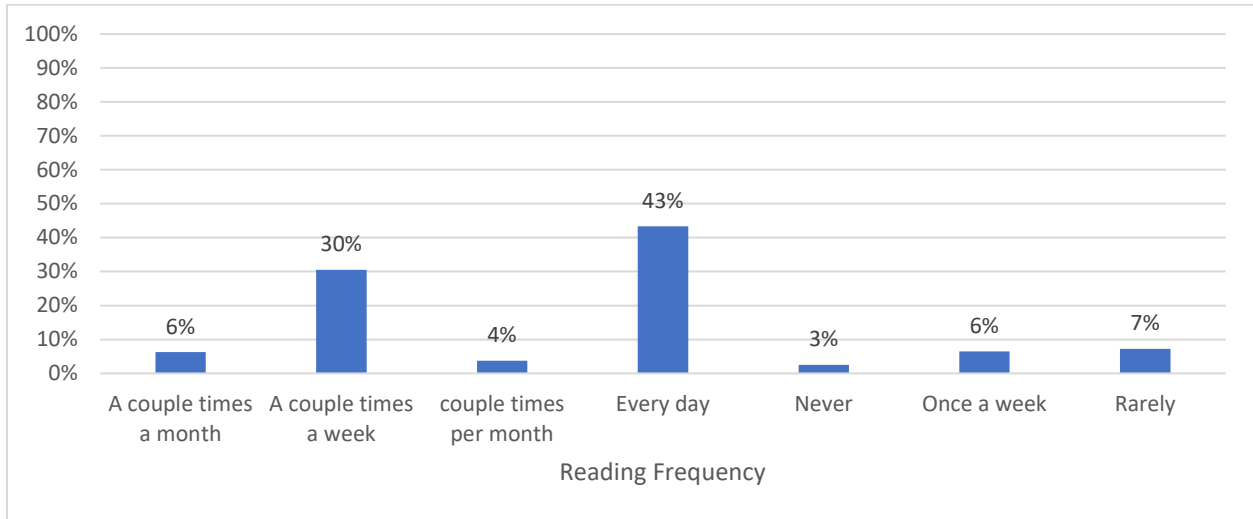
Parents were asked how often they read to their child. The distribution of responses reveals most parents read to their child every day (43%) or a couple of times per week (30%) (Figure 3a). For regression models we used a binary variable of 1 = at least two or more times per week and 0 = other. Preliminary analyses indicated the threshold for impact is moving to a reading frequency of two or more times per week. Although there is no overall effect (Figure 3b), there is a



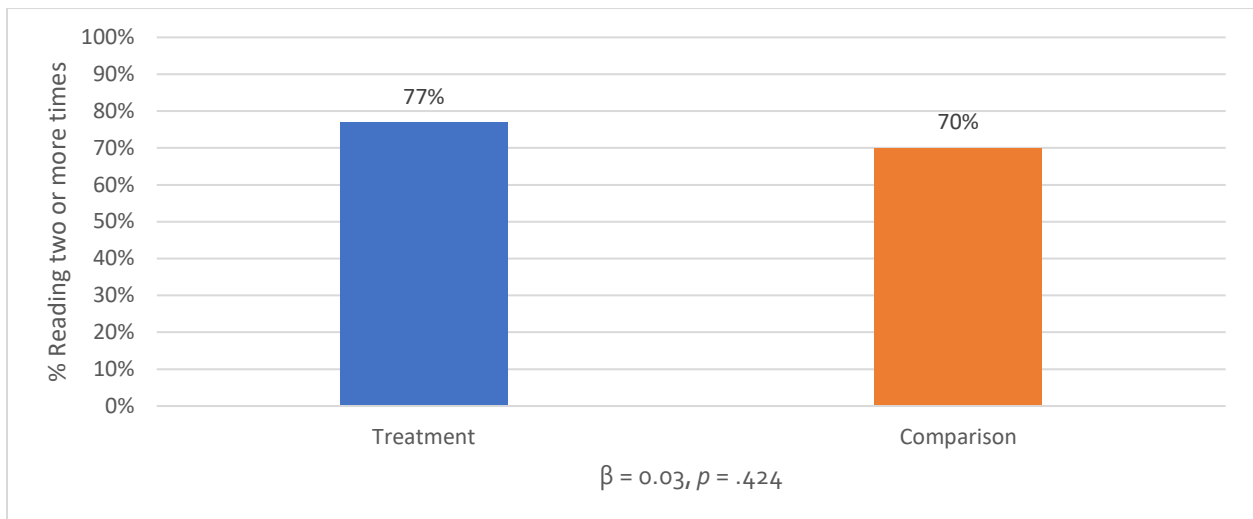
statistically significant interaction with economic status ( $\beta=-0.26, p = .008$ , Figure 3c), but here, driven by the economically advantaged students ( $\beta=0.15, p = .022, d = 0.41$ ).

Programmatically, this is an outcome explicitly incentivized by Boston Saves. Families of students in 3<sup>rd</sup> grade and younger can earn \$5 for reading together for 20 minutes per day for 20 days per quarter (\$20 annually). Families record reading minutes in the Savings Center. This incentive is not dependent on families contributing their own dollars.

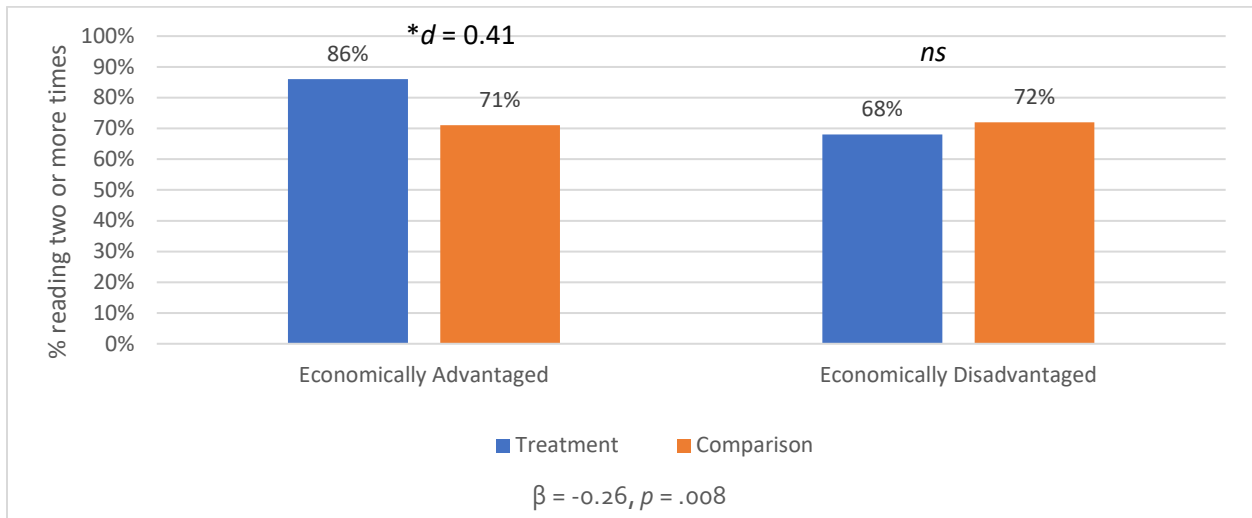
**Figure 3a. Reading Frequency Distribution**



**Figure 3b. Effect of Boston Saves on Reading Frequency**



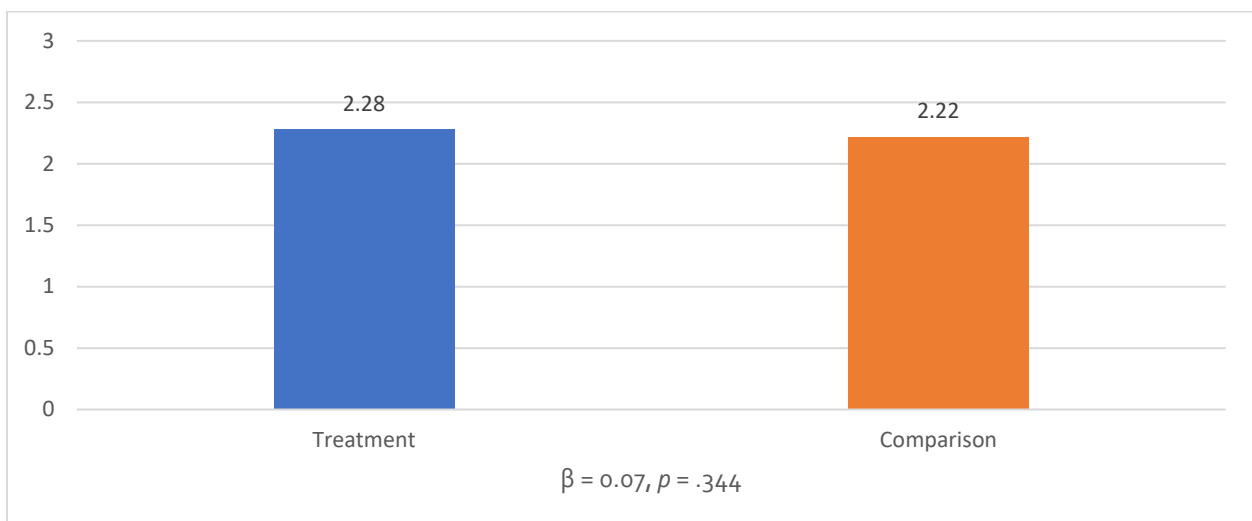
**Figure 3c. Effect of Boston Saves on Reading Frequency, by Economic Disadvantage Status**



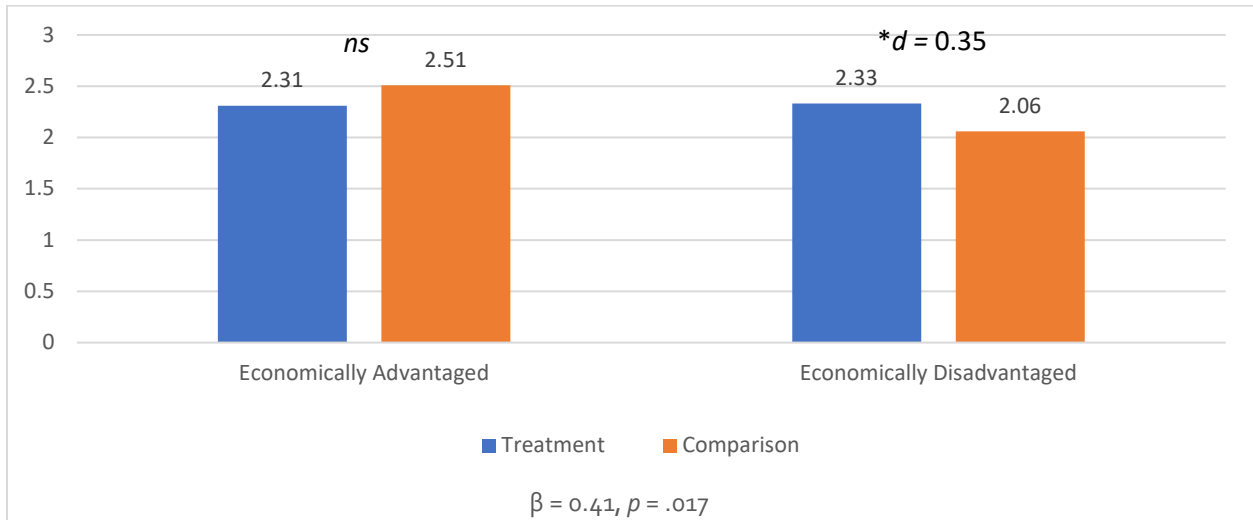
**Life Satisfaction**

Parents were asked about overall life satisfaction with a single item, “*In general, how satisfied are you with your life?*” with response options from 0 = very dissatisfied to 3 = very satisfied. Responses from the treatment and comparison group were not statistically different (Figure 4a). However, we did observe a significant treatment by economic disadvantaged status interaction, revealing a positive and significant effect for parents/guardians of economically disadvantaged students (Figure 4b).

**Figure 4a. Life Satisfaction: Fully Adjusted Main Effect**



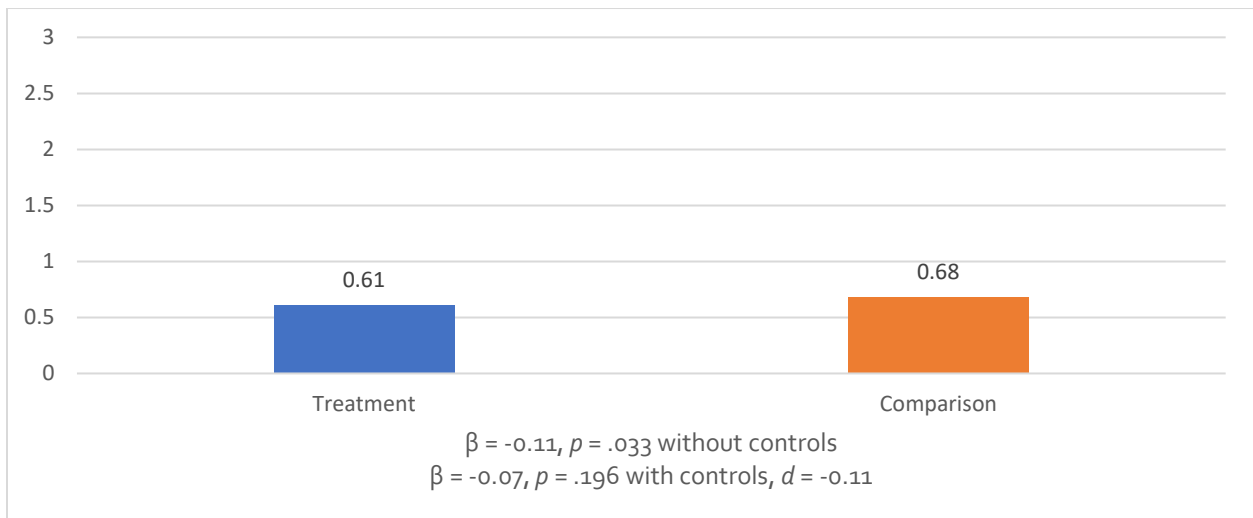
**Figure 4b. Life Satisfaction: Fully Adjusted Main Effect for Interaction by Economic Disadvantage Status**



Parent Depression

Parents were asked to self-report their systems of depression using a four-item scale. Items asked about frequency of the following experiences over the prior 30 days: felt depressed, felt lonely, had crying spells, or felt sad. Response options ranged from 0 = none of the time to 3 = all of the time. For this sample, the scale reliability of  $\alpha=0.89$  was high. Overall scores were low at 0.61 treatment and 0.68 comparison and not statistically significantly different after adjusting for covariates (see Figure 5).

**Figure 5. Parental Depression: Unadjusted and Fully Adjusted for Main Effect**

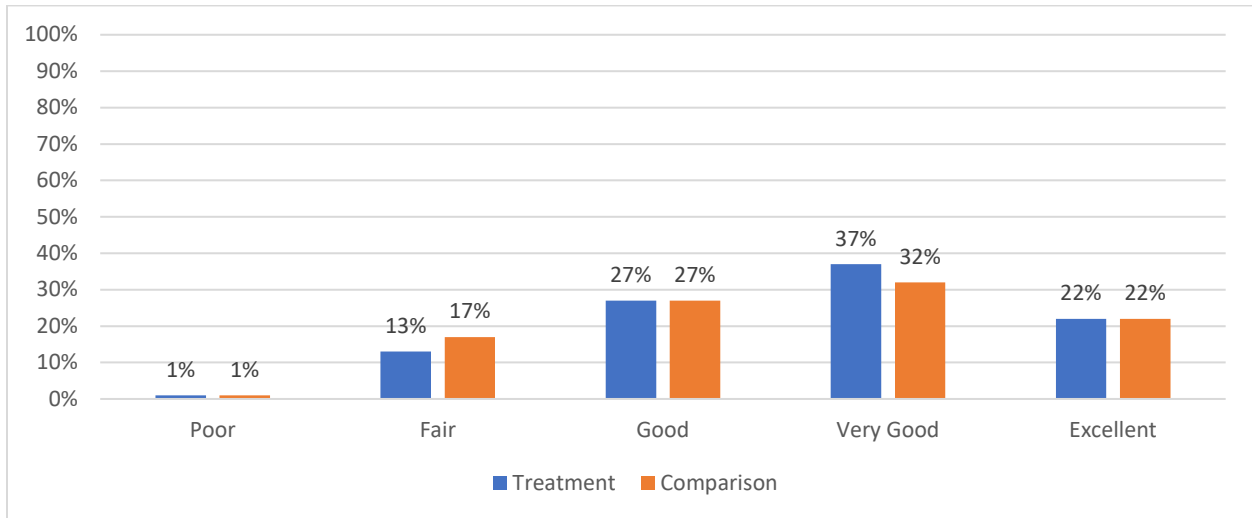


Parent and Child Health

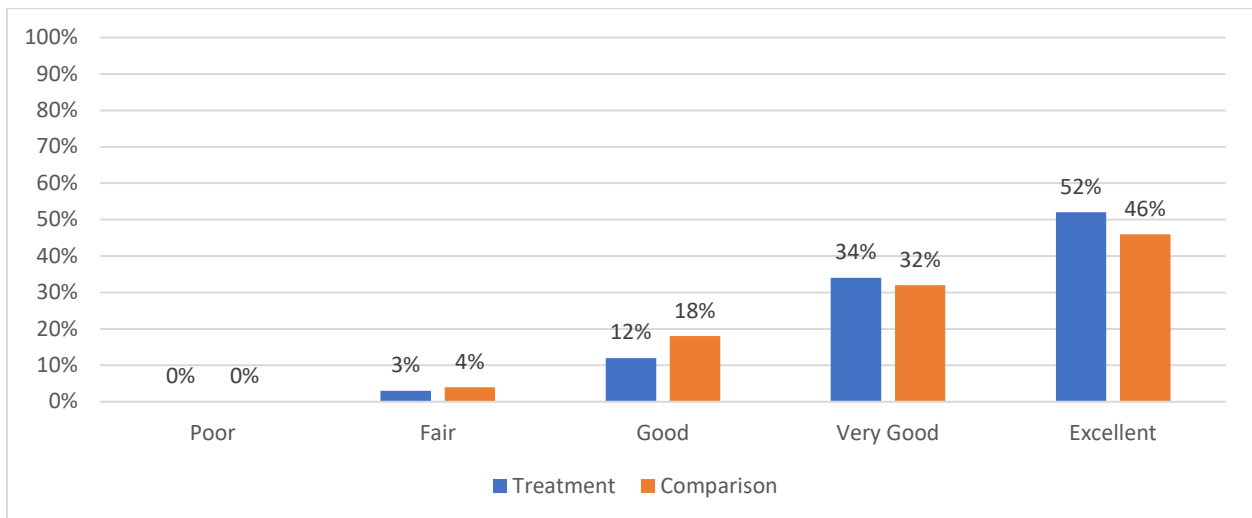
Parents were asked to self-report their own health overall and for their child. While there are no statistically significant differences between the treatment and comparison groups, we report the findings in Figures 6a and 6b descriptively. Figure 6a shows that most respondents indicated

their own health was very good or excellent. When reporting on their child (Figure 6b), respondents were more optimistic with the majority indicating their child’s health was excellent.

**Figure 6a. Parent Self-Report of Overall Health**



**Figure 6b. Parent Report of Child’s Overall Health**

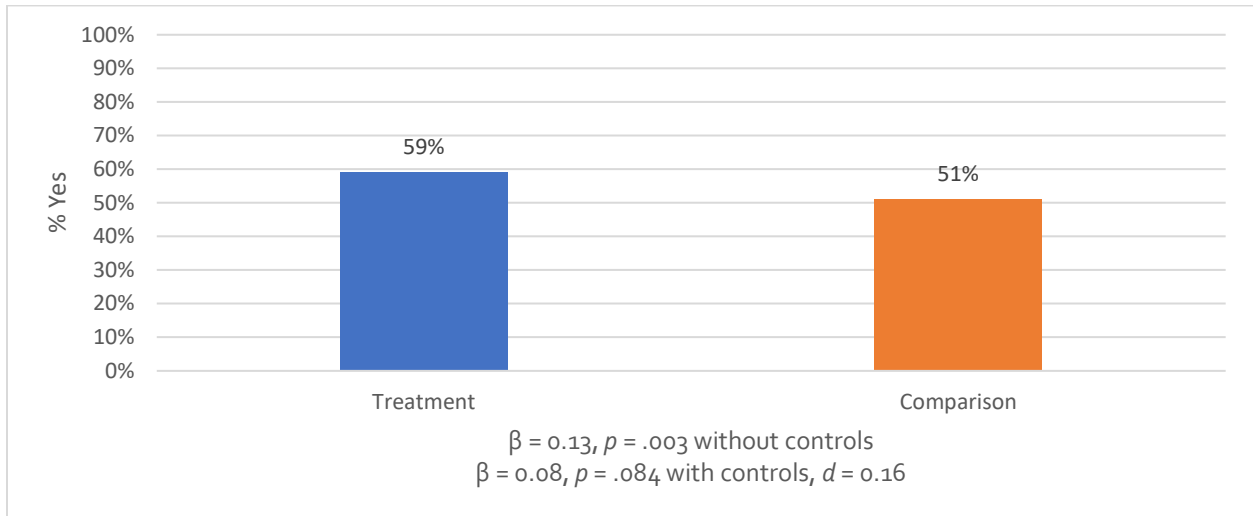


### Family Saving

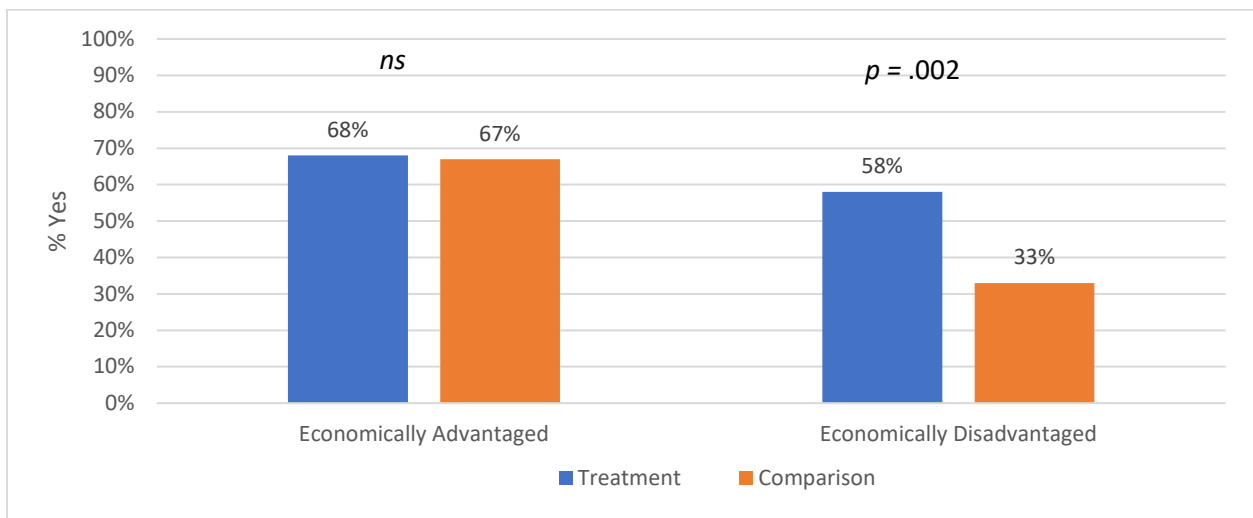
Parents were also asked about their family saving behaviors. While overall, there are few statistically significant differences between the treatment and comparison groups, we do observe a pattern of findings suggesting a positive trend for economically disadvantaged findings. Figure 7a shows a positive and marginally significant impact of Boston Saves on the percentage of families reporting that they are saving for their child’s future education. When asked about a personal budget (Figure 7b), we observe a marginally significant treatment by economic disadvantage status interaction. Specifically, we find a large effect for economically

disadvantaged families—almost closing the gap with economically advantaged families on this measure.

**Figure 7a. Saving for your child’s future education**

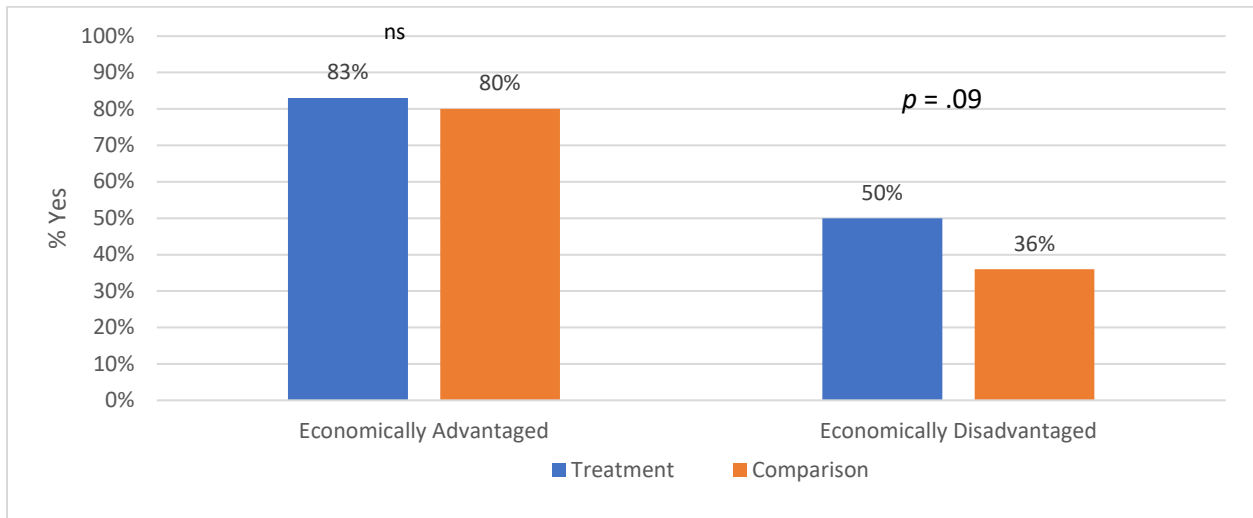


**Figure 7b. Currently have a personal budget, spending plan or financial plan**



Parents were asked if they currently have an automatic deposit for electronic transfer set up to put money away for a future use (savings) (Figure 7c). We similarly find a positive and marginally significant effect on this measure for economically disadvantaged families, but no differences for economically advantaged families. Although not significant, this findings is consistent with other measures and of theoretical and policy importance.

**Figure 7c. Automated Systems for Saving**



Nearly all families report having a checking account. When asked about savings accounts in the household, we observe a similar pattern of findings as shown in Figures 7b and 7bc. Nearly all economically advantaged households report having a savings account, whereas the baseline in the economically disadvantaged comparison group is 71% but rises to a statistically significant difference of 86% among economically disadvantaged in the treatment group ( $p = .047$ ). Thus, Boston Saves is helping economically disadvantaged families close the gap with advantaged families in establishing a savings account.

**Figure 7d. Current Savings Account.**

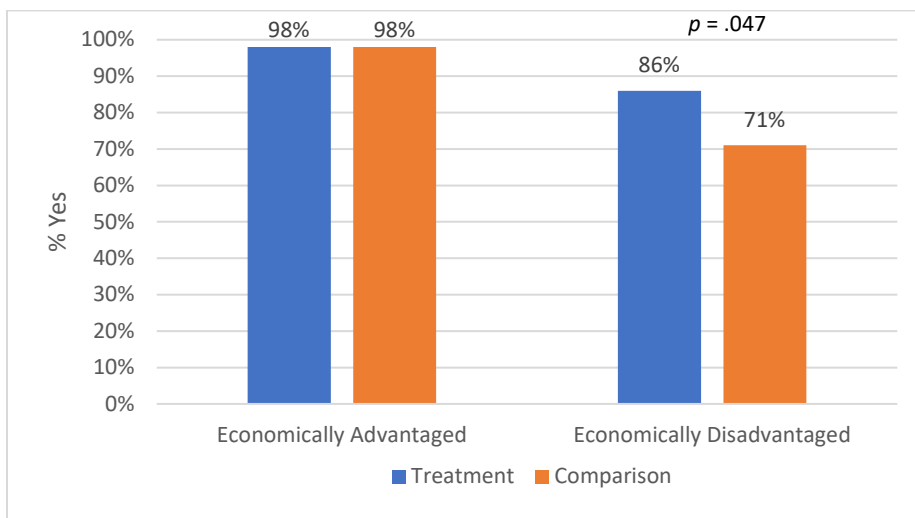


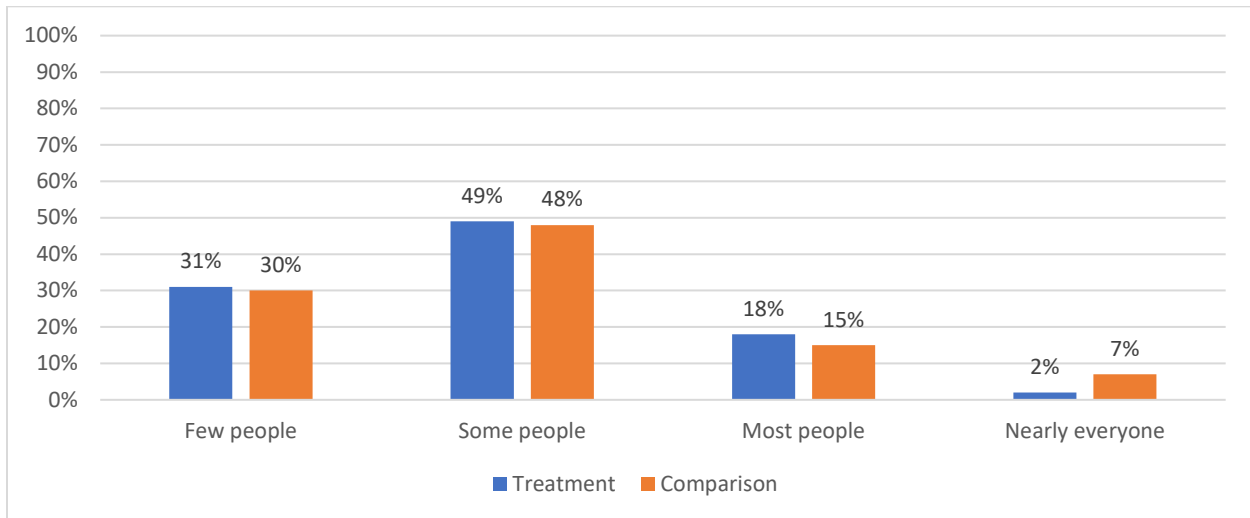
Table 4 displays the savings vehicles families report using. There are no statistically significant impacts of Boston Saves on the specific savings vehicles.

**Table 4. Savings Vehicles**

Savings Vehicle	Treatment	Comparison
529	47%	38%
Baby Steps	4%	6%
Fidelity Rewards Visa	7%	3%
Coverdell Education Savings Account	4%	3%
Checking Account	33%	28%
Savings Account	66%	68%
Mutual Fund	17%	11%
Stocks or Bonds	19%	17%
CDs	12%	11%
Roth IRAs	16%	12%
Other	33%	35%

**Figure 8. Perceptions of Community Savings**

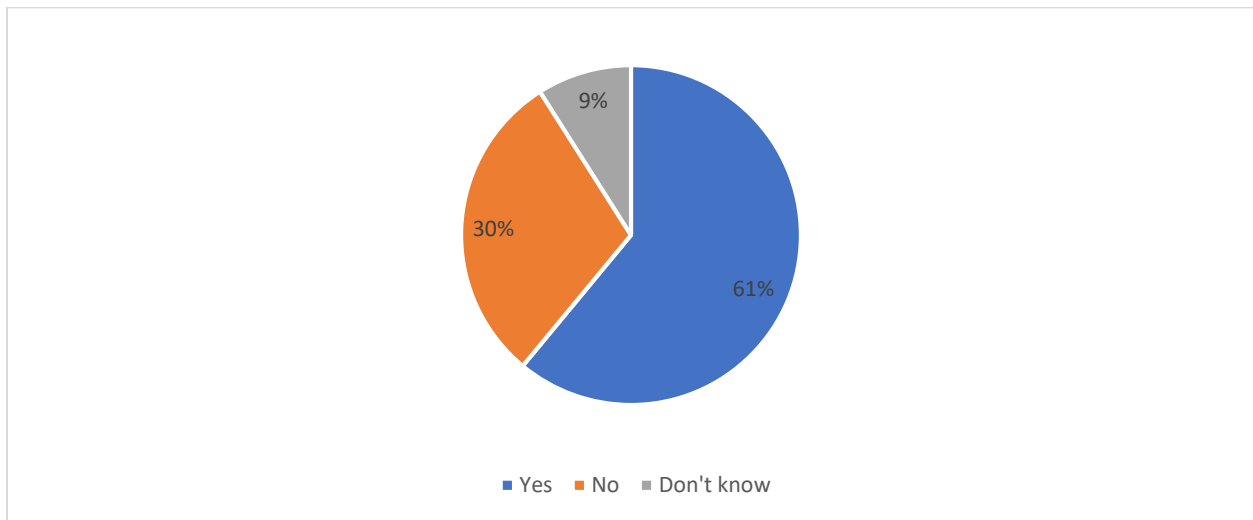
Parents were asked to what extent they believe that people in their community are saving for their children’s future education (Figure 8). There are no statistically significant impacts of Boston Saves on perceptions of community savings at this point, though we would anticipate effects on this measure in the longer-term as more families are enrolled and engaging with the program.



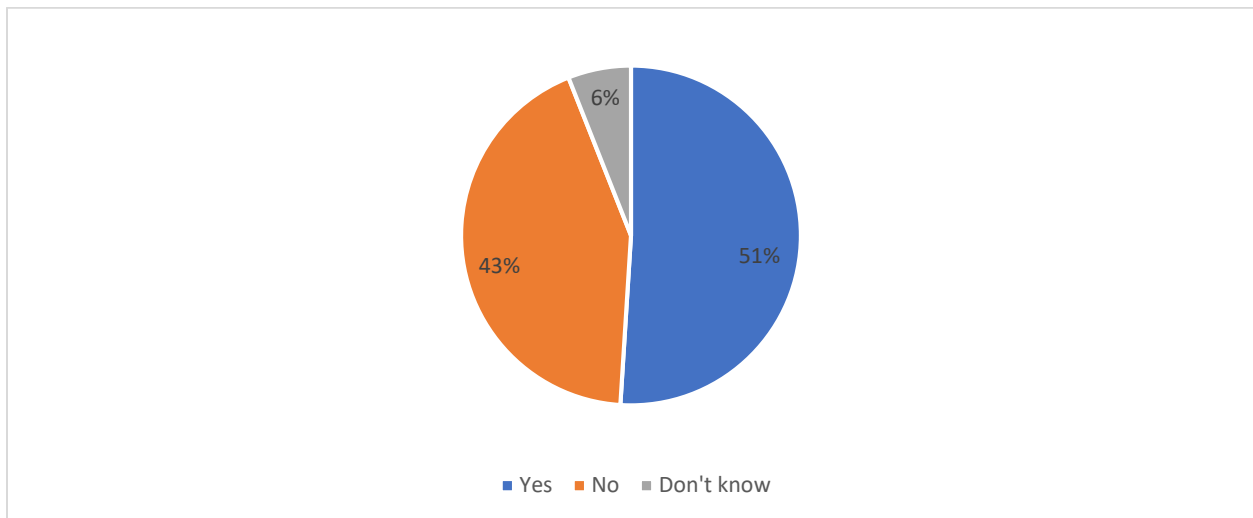
### Boston Saves Program Feedback (Treatment Group Only)

Awareness and engagement are essential for the success of any CSA program. In Figure 9a we observe that nearly 40% of those parents/guardians who do have a Boston Saves account do not believe or are unsure if they even have an account. Figures 9b and 9c and Table 5 descriptively highlight engagement with specific program components, showing that more than half of respondents have logged into the Savings Center, and that the vast majority of respondents (77%) have not attempted or successfully linked a personal banking account. While the majority of respondents are aware of the Boston Saves seed deposit, only a minority of respondents (15%-48%) are aware of other opportunities to earn incentives in their CSA.

**Figure 9a. Self-report child has a Boston Saves account**

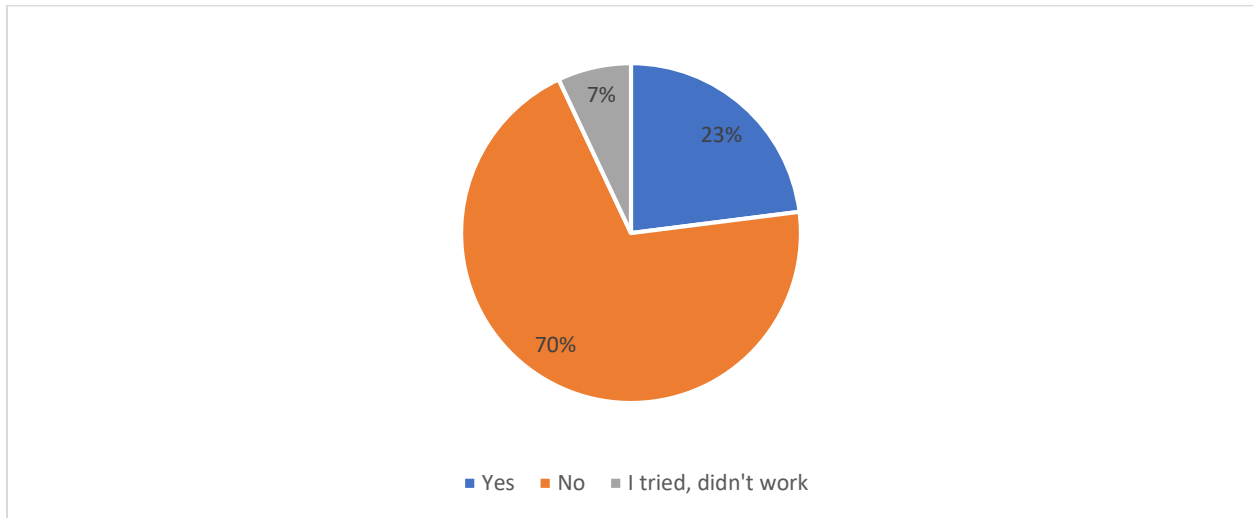


**Figure 9b. Has logged into the “Savings Center” for your Boston Saves account**





**Figure 9c. Linked Boston Saves account with personal bank account information**



**Table 5. Are aware of the following Boston Saves program components**

Boston Saves Component	Percentage
Family champions	16%
\$50 seed deposit	74%
\$25 incentive for linking account	45%
\$5 deposit incentive for every \$25 saved in 3-month period	35%
\$25 for completing financial checkup	15%
\$5 for each quarter for reading with your child	48%
Option to set up custodial account	15%

## Discussion

This report examines early descriptive and impact findings from Boston Saves. Beginning in 2019, Boston Saves provides every student enrolled in kindergarten a child savings account (CSA) including an initial deposit of \$50 from the City of Boston and ongoing opportunities to receive incentives. This study uses data from the first round of parent survey data collection (N=514) and available administrative data. Since many CSAs programs, such as Boston Saves, start at a very young age with the goal of increasing post-secondary outcomes which come years later, finding short-term outcome metrics that shed some light on whether the program is on track or not is critical (Elliott & Harrington, 2016). This discussion section, however, will narrowly focus on some of the key metrics identified by Elliott and Harrington (2016) (e.g., social-

emotional development, reading proficiency, and parental educational expectations). Elliott and Harrington (2016) focused on identifying metrics that have been shown to be predictors of children's academic attainment and for which there was already theoretical and empirical evidence within the CSA field.

*Social-emotional development.* Regarding social-emotional development, research shows that it is a key predictor of children's academic success (Durlak et al., 2011). Given this, interventions that have a positive relationship with students' social-emotional development are highly sought after by schools. Findings from this study indicate that Boston Saves is having a positive and significant impact on students' social-emotional development. This finding is consistent with past research. Research conducted by Huang, Sherraden, Kim, and Clancy (2014) find that participating in a CSA program has a positive effect on the social development of children approximately four-years old. Similar to findings in this study, they also find that the effects are strongest among low-income children. Furthermore, the effect size ( $d = 0.41$ ) found in this study is notable when compared with previous studies. This finding is promising because Boston's program, like most other CSA programs, is most concerned with finding interventions that have positive effects on hard-to-reach low-income children's outcomes.

*Reading frequency.* While in this study the researchers were not able to assess reading test scores, they were able to examine the association between participating in Boston Saves and how many times per week parents read to their children, which is an important predictor of reading proficiency. Prior research finds that reading aloud to children even when the child can read on their own, is positively related to such things as children's language, phonological awareness, print concepts, comprehension, and vocabulary outcomes (Swanson et al., 2011). Given this, while this study does not directly examine reading proficiency, reading to children has been shown to be associated with reading proficiency. Importantly then, findings from this study provide evidence that Boston Saves parents are more likely to read to their children than parents not in Boston Saves.

*Life satisfaction.* Life satisfaction is an indicator of quality of life related to a feeling of well-being or happiness (Gilman & Huebner, 2003). Life satisfaction provides us a way to assess the policy effectiveness of providing parents and their children with a CSA. To the authors' knowledge, this is the first CSA study to examine the association between participating in a CSA program and life satisfaction. Findings from this study indicate a positive association between participating in Boston Saves and self-reported life satisfaction. However, this effect was found only among the economically disadvantaged. This is interesting because families do not receive funds from their accounts and many of them only have smaller amounts saved at this time. This suggests that it is something about parents simply having access to an institutional structure like a CSA that allows them to begin to save and plan for their child's future that makes them feel better about their lives. This is similar to findings by Huang, Kim and Sherraden (2017). They found evidence that participating in a CSA program reduced about 50% of the negative effect that material hardship had on children's social-emotional development. These effects were

strongest among children living in households with higher levels of material hardship. Again, this is the case even though the CSA did not provide families with money they could spend on consumption today.

*Parental educational expectations.* However, not all outcomes tested had a positive significant relationship with participating in Boston Saves. This study also examined the relationship between participation in Boston Saves and parental educational expectations. The adjusted model findings were not significant. The non-significant finding is inconsistent with previous research (e.g., Kim, Sherraden, Huang, and Clancy, 2015). Four reasons seem best able to explain the different findings. First, there is an unusually high percentage (about 30%) of families enrolled in Boston Saves who do not know they are in the program (i.e., have an account). The higher percentage of people who do not know they have an account, at least in part, is because children are automatically enrolled into the program. The researchers and their vast experience with CSA programs have seen, even in programs where families have to sign up to participate, families who do not know they have a CSA. However, the percentage is usually much lower than found here. The higher percentage not knowing may be related to the program being administered in a large urban city making communicating about the program more difficult than in much smaller suburban and rural programs. A second reason for the different expectation findings might be due to the relatively small sample size. The third reason identified here might be because there is not a lot of variability in the expectations variable. That is, most parents expect their child to attend college (89% expect and 11% do not expect). The fourth and final reason is that the program is still relatively new having started in 2019. Each one of these factors compounds the chances of not finding a significant effect.

Even though there is no significant condition by economic disadvantage interaction on parent expectations (college or higher) and no significant main effect of condition, there is a marginally significant effect of condition for economically disadvantaged students ( $p = .069$ ). While it is atypical to analyze subsamples without an interaction, given the consistency and relevance of this finding, it is useful to highlight. There is some justification for examining economically disadvantaged families as a subgroup in previous research as well. Research has shown that while there is little variation in parental educational expectation in the aggregate (we also find that in this study), when economic advantage is considered, economically disadvantaged parents have lower expectations for their children than their economically advantaged counterparts (Lippman et al., 2008). Similarly, in this study we find that 96% of economically advantaged parents in the comparison expect their child to attend college while 82% of economically disadvantaged parents in the comparison do (92% of economically disadvantaged in Boston Saves do). This might help explain why a marginally significant effect is found when economically disadvantaged families are looked at separately as a subgroup. We should note, 82% is still a high percentage.

Given this, there is reason to believe with a larger sample a positive effect would be detected. In further support of this conclusion, in the subsample of only disadvantaged children we find that

parental educational expectations are marginally significant. So, there is the possibility that Boston Saves is positively influencing parents' educational expectations, but a larger sample size would be needed to detect the effect given the factors described above. Clearly more research is needed before a definitive conclusion can be drawn on this outcome.

*Parental depression.* Similar to parental educational expectations, regarding parental depression, the adjusted model did not find a significant association between participating in Boston Saves and depression. This is also inconsistent with past research. For example, Huang, Sherraden, and Purnell (2014) find that mothers who had a CSA had lower depression scores than mothers who did not.

While this study does not have administrative data on family saving, there are some interesting self-reported findings on financial matters more generally that indicate Boston Saves is serving as a gap closing program between economically advantaged and economically disadvantaged. For example, economically disadvantaged families in Boston Saves are more likely to have a personal budget or spending plan, more likely to have automatic deposit set up, and more likely to have a savings account than those in the comparison.

While the economically disadvantaged families in Boston Saves are still less likely to have a personal budget, automatic deposit, or savings account than the economically advantaged families in the comparison, the gap is substantially less. This suggests, while not statistically different, economically disadvantaged families in Boston Saves see improved financial outcomes more generally than their economically disadvantaged counterparts not in Boston Saves. This might be because of the relatively high engagement of families with their accounts. For example, while we do not have savings data, we do find that 51% of families in Boston Saves have taken the step to log into the "Savings Center" for their Boston Saves account.

## Conclusion

There are some important ways that this research can improve moving forward. For example, in the upcoming 2023 survey, increased effort to expand the sample size is important to better detect effects when they exist. Also, a larger sample size would allow for important research on different demographic groups. For example, while this study did provide additional evidence that effects are strongest among economically disadvantaged children and their families on some of the outcomes, more research is needed on different racial and ethnic groups. Large diverse urban cities provide some of the best opportunities to examine the effects of race and ethnicity, but only if the sample size is large enough.

Further, with 40% of families unaware they have an account, additional work is needed to increase awareness of the program. This might be a problem more likely to show up in large urban cities where communication cannot take place at a local fair or other common meeting places like what happens in more suburban or rural areas. More research is also needed on this topic within the Boston Saves study in the coming year. Specifically, it would be helpful to learn

if there are particular schools or communities where knowledge of account ownership is lower than in others. In any case, effects are unlikely to occur in families who are unaware of the program. This will have a negative impact on the success of the program if additional efforts are not made to reduce the number of families who are unaware they are in the program.

Overall, though, early findings suggest that Boston Saves is on track for meeting its long-term goal of increasing college attendance. This assessment is based on positive significant findings on several key short-term outcome metrics. Specifically, researchers find that participating in Boston Saves is associated with both improved social-emotional development and reading frequency. Both have been shown in previous educational research to be key predictors of future academic attainment. In addition, even though Boston Saves did not have a statistically significant impact on parental educational expectations or parental depression, it did with parental life satisfaction.

Certainly, more research is needed. The next survey is scheduled for spring of 2023. However, these early findings are encouraging, especially given that the program launch and these outcomes were measured during the height of the COVID-19 pandemic. Importantly, these findings are taking place in one of the few CSA programs in a large urban US city among school age children. There has been some research on Kindergarten to College in San Francisco, CA, another large urban city, but only a few outcomes were examined (Elliott, Lewis, O'Brien, et al., 2017). There is also research just getting underway on CollegeBound in Saint Paul, MN. However, it is fair to say, this work on Boston Saves is the most extensive research on a CSA program among school age children living in a large US City to date. As such, it has implications not only for the City of Boston and the state of Massachusetts but for the CSA field more broadly.

## References

- Azzonlini, D., Martini, A., Rettore, E., Romano, B., Schizzerotto, A., & Vergolini, L. (2018). *Testing a social innovation in financial aid for low-income students: Experimental evidence from Italy*. IZA Institute of Labor Economics.
- Bloom, H. S., Hill, C., Black, A., & Lipsey, M. W. (2008). *Performance trajectories and performance gaps as achievement effect-size benchmarks for educational interventions*. New York: MDRC.
- Durlak, J.A., Weissberg, R.P., Dymnicki, A.B., Taylor, R.D., & Schellinger, K.B. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. *Society for Research in Child Development*, 82(1), 405-432.
- Elliott, W. (2009). Children's college aspirations and expectations: The potential role of college development accounts (CDAs). *Children and Youth Services Review*, 31(2), 274-283.
- Elliott, W. (2013). Small-dollar children's savings accounts and children's college outcomes. *Children and Youth Services Review*, 35 (3), p. 572-585.
- Elliott, W. and Beverly, S. (2011a). Staying on course: The effects of savings and assets on the college progress of young adults. *American Journal of Education*, 117(3), 343-374.
- Elliott, W. and Beverly, S. (2011b). The role of savings and wealth in reducing "wilt" between expectations and college attendance. *Journal of Children and Poverty*, 17(2), 165-185.
- Elliott, W., Choi, E. H., Destin, M. and Kim, K. (2011). The age old question, which comes first? A simultaneous test of children's savings and children's college-bound identity. *Children and Youth Services Review*, 33(7), 1101-1111.
- Elliott, W., Chowa, G. and 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*, 1(4). 192 –205.
- Elliott, W., Destin, M, and Friedline, T. (2011). Taking stock of ten years of research on the relationship between assets and children's educational outcomes: Implications for theory, policy and intervention. *Children and Youth Services Review*, 33(11), 2312—2328.
- Elliott, W. & Harrington, K. (2016). Identifying short-term outcome metrics for evaluating whether children's savings accounts programs are on track.  
<https://www.bostonfed.org/publications/community-development-issue-briefs/2016/identifying-short-term-outcome-metrics-for-evaluating-whether-childrens-savings-accounts-programs-are-on-track.aspx>

- Elliott, W., & Lewis, M. (2018). *Making education work for the poor: The potential of children's savings accounts*. Oxford University Press.
- Elliott, W., Lewis, M., O'Brien, M., LiCasli, C., Brown, L., Tucker, N. and Sorensen, N. (2017). Children's Savings Account Program: School Outcomes Report <https://aedi.ssw.umich.edu/publications/1949-children-s-savings-account-program-school-outcomes-report>.
- Elliott, W., Song, H-a, and Nam, I. (2013). Small-dollar accounts, children's college outcomes and wilt. *Children and Youth Services Review*, 35(3), p. 535-547.
- Elliott, W., Zheng, H., Sabol, T., and O'Brien, M. (2021). A step toward measuring children's college-bound identity in children's savings accounts programs: The case of Promise Scholars. *Children and Youth Services Review*, 121.
- Gilman, R. and Huebner, S. (2003). A review of life satisfaction research with children and adolescents. *School Psychology Quarterly* 18(2), 192-205.
- Hahn, J., Todd, P., & van der Klaauw, W. (2001). Identification and estimation of treatment effects with a regression-discontinuity design. *Econometrica*, 69(1), 201-209.
- Hernandez, D. J. (2011). *Double jeopardy: How third-grade reading skills and poverty influence high school graduation*. Baltimore, MD: Annie E. Casey Foundation.
- Huang, J., Beverly, S. G., Clancy, M. M., Schreiner, M., & Sherraden, M. (2021). *A long-term experiment on Child Development Accounts: Update and impacts of SEED for Oklahoma Kids* (CSD Research Report No. 21-07). Washington University, Center for Social Development. <https://doi.org/10.7936/e8mf-p262>
- Huang, J., Kim, Y., and Sherraden, M. (2017). Material hardship and children's social-emotional development: Testing mitigating effects of Child Development Accounts in a randomized experiment. *Child: Care, Health and Development*, 43(1), 89–96.
- Huang, J., Sherraden, M., and Purnell, J.Q. (2014). Impacts of child development accounts on maternal depressive symptoms: Evidence from a randomized statewide policy experiment. *Social Science & Medicine* 112(2014), 30-38.
- Huang, J., Sherraden, M., Kim, Y., & Clancy, M. M. (2014). Effects of child development accounts on early social-emotional development: An experimental test. *Journal of American Medical Association Pediatrics*, 168(3), 265–271.
- 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.
- Jung, E., Hwang, W., Zhang, Y., & Zhang, Y. (2018). Do Parents' Educational Expectations in Adolescence Predict Adult Life Satisfaction? *Family Relations*, 67(4), 552-566.



- Kim, Y., Huang, J., Sherraden, M., & Clancy, M. (2017). Child development accounts, parental savings, and parental educational expectations: a path model. *Children and Youth Services Review, 79*, 20-28.
- Kim, Y., Sherraden, M., Huang, J., and Clancy, M. (2015). Child development accounts and parental educational expectations for young children: Early evidence from a statewide social experiment. *Social Service Review, 89*(1), 99-137.
- Lee, D.S., & Card, D. (2008). Regression discontinuity inference with specification error. *Journal of Econometrics, 142*(2), 655-674.
- Lesnick, J., Goerge, R., Smithgall, C., Gwynne, J. (2010). A longitudinal analysis of third-grade students in Chicago in 1996-97 and their educational outcomes. Chicago, IL: Chapin Hall Center for Children at the University of Chicago.
- Lippman, L., Guzman, L., Dombrowski Keith, J., Kinukawa, A. Schwalb, R., and Tice, P. (2008). Parent Expectations and Planning for College: Statistical Analysis Report (NCES 2008-079). National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education. Washington, DC.
- Lloyd, K. E. (1978). Behavior analysis and technology in higher education. In A. D. Catania and T. A. Brigham (Eds.), *Handbook of applied behavior analysis: Social and instructional processes*. New York: Irvington.
- Oyserman, D. (2001). Self-concept and identity. In A. Tesser and N. Schwarz (Eds.), *Blackwell Handbook of Social Psychology* (pp. 499–517). Malden, MA: Blackwell Press.
- Oyserman, D. (2007). Social identity and self-regulation. In A. Kruglanski & T. Higgins (Eds.), *Handbook of social psychology* (2<sup>nd</sup> ed., pp. 432-453). NY: Guilford Press.
- Oyserman, D. (2013). Not just any path: Implications of identity-based motivation for school outcome disparities. *Economics of Education Review, 33* (1), 179-190.
- Oyserman, D., Bybee, D. & Terry, K. (2006). Possible selves and academic outcomes: How and when possible selves impel action. *Journal of Personality and Social Psychology, 91*, 188-204.
- Oyserman, D., Elmore, K., & Smith, G. (2012). Self, self-concept, and identity. In M. Leary and J. Tangney (Eds.), *Handbook of Self and Identity* (2nd ed., pp. 69–104). NY: Guilford.
- Oyserman, D. & Fryberg, S. A. (2006). The possible selves of diverse adolescents: Content and function across gender, race and national origin. In J. Kerpelman & C. Dunkel (Eds.), *Possible selves: Theory, research, and applications* (pp. 17-39), Huntington, NY: Nova.
- Oyserman, D., & James, L. (2008). Possible selves: From content to process. In K. Markman, W. Klein, and J. Suhr (Eds.), *The Handbook of Imagination and Mental Stimulation* (pp. 373–394). NY: Psychology Press.



- Oyserman, D., & James, L. (2011). Possible identities. In S. Schwartz, K. Luyckx, & V. Vignoles (Eds.), *Handbook of Identity Theory and Research* (pp. 117–145). Springer-Verlag.
- Oyserman, D., & Markus, H. (1990). Possible selves and delinquency. *Journal of Personality and Social Psychology*, 59, 112–125.
- Pfeffer, F. (2016). *Growing wealth gaps in education*. Ann Arbor, MI: University of Michigan National Poverty Center. Retrieved from <http://npc.umich.edu/publications/u/2016-06-npc-working-paper.pdf>
- Porter, J. (2003). Estimation in the regression discontinuity model. Cambridge, MA: Harvard University
- Prosperity Now. (2022). *Innovation propels the movement: The state of the children's savings field 2021*.  
<https://prosperitynow.org/sites/default/files/images/CSA%20SOTF%20Cover%20Page/CSA-SOTF-2022-Innovation-Propels-Movement.pdf#:~:text=Innovation%20Propels%20the%20Movement%201%202021%20was%20another,between%202019%20and%202020—as%20shown%20in%20Figure%201>
- Quintero, J. (2012). *The great cost shift: How higher education cuts undermine the future middle class*. New York, NY: Demos Media  
[https://www.demos.org/sites/default/files/publications/TheGreatCostShift\\_Demos\\_0.pdf](https://www.demos.org/sites/default/files/publications/TheGreatCostShift_Demos_0.pdf)
- Sallie Mae. (2018). *How America saves for college: Sallie Mae's national study of parents with children under age 18*. Newark, DE: Sallie Mae.  
[https://www.salliemae.com/assets/about/who\\_we\\_are/HAS2018\\_Full\\_Report.pdf](https://www.salliemae.com/assets/about/who_we_are/HAS2018_Full_Report.pdf)
- Swanson, E., Vaughn, S., Wanzek, J., Petscher, Y., Heckert, J., Cavanaugh, C., Tackett, K. (2011). A synthesis of read-aloud interventions on early reading outcomes among preschool through third graders at risk for reading difficulties. *Journal of Learning Disabilities*, 44(3), 258–275.
- U.S. Department of Treasury (2009). *An analysis of Section 529 college savings and prepaid tuition plans: A report prepared by the Department of Treasury for the White House Task Force on Middle Class Working Families*. Washington, DC: U.S. Department of Treasury. <https://www.treasury.gov/press-center/press-releases/Documents/529.pdf>
- What Works Clearinghouse. (2022). What Works Clearinghouse procedures and standards handbook, version 5.0. U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance (NCEE). This report is available on the What Works Clearinghouse website at <https://ies.ed.gov/ncee/wwc/Handbooks>.

Zheng, H., Starks, B., Ellis, J., O'Brien, M., and Elliott, W. (2020). An examination of parental college expectations' mediating role between children's savings accounts and children's educational attainment by income level. *Sociology Mind*, 10,165-186.

# Appendix

Boston Saves Parent Survey

# Boston Saves Parent Survey

Welcome to the Boston Saves Parent Survey!

## Study Purpose

The City of Boston, Boston Public Schools and the Summitlab Consulting Group are collaborating to conduct a study of parent and child well-being for families with children in the early elementary grades. You are invited to complete this survey as a parent or guardian of a child enrolled in Grade ONE in Boston Public Schools during the 2020-21 school year. We are interested in learning more about you and your child's well-being, your expectations for your child's education, and how you are planning for the future. There are no right or wrong answers to the question.

## What We Are Asking of You

We are asking you to complete this web-based survey. The survey will take approximately 20-25 minutes of your time to complete.

## Benefits

Allowing us to include your information will help us help us better understand how to develop or improve city and district programs to improve the well-being of children and families in Boston.

You will not be paid for your participation in this study; however, after survey completion you will be redirected to a second survey that will collect your contact information for a chance to win one of 81 \$100 Amazon gift cards—one gift card for respondents from each of 81 participating schools in Boston. Your chances of winning the gift card depend on the number of parents or guardians that complete the survey at your child's school. Your contact information will not be connected with your survey responses.

## Risks

Your participation in this study involves minimal-to-no risk. However, any time you share information, there is a risk of accidental disclosure. As described below, the research team uses strict data security procedures, ensuring this risk is very small.

## Voluntary Participation

Participation in this study is voluntary. If you decline, there will be no penalty to you and there will be no effect on your relationship with your school or the district. You may skip any question that is asked and may withdraw from the study at any time without penalty.

## Your Confidentiality and Privacy

Your participation is confidential. We use strict data security practices to protect the privacy of all information we collect. We will not provide information that identifies you to anyone outside the research team. We also will remove your name from your responses before conducting any analyses. Your responses will not be shared with your child's school or anyone else and we will never use your name or your child's name in any reports. Information we collect will not be used or distributed for future research studies.

### More Information

If you have any questions regarding this study, please contact the Principal Investigator, Dr. Nicholas Sorensen at Summitlab Consulting Group by phone (734-355-6493) or email ([nick@summitlabconsulting.com](mailto:nick@summitlabconsulting.com)). For questions regarding your rights as a research participant, contact the AIR Institutional Review Board at [IRBChair@air.org](mailto:IRBChair@air.org) or toll free at 1-800-634-0797.

### Permission

If you have read the information on this page and consent to participate in the study, please click on "Yes" to proceed to the survey. If you do not want to participate, please select "No" to exit the survey.

---

#### \* Required

1. I have read the information on this page and I agree to participate in this study. \*

*Mark only one oval.*

- Yes, I agree to participate
- No, I do not agree to participate

Please enter your name and your child's name below. This information will be removed from our data before analysis but lets us know that you've completed the survey.

2. Your First Name \*

---

3. Your Last Name \*

---

Your Child's Name (who is enrolled in Grade ONE in Boston Public Schools).

4. Child's First Name \*

---

5. Child's Last Name \*

---

6. Child's School \*

---

7. Child's Boston Public Schools ID Number

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Throughout this survey, some questions refer to "your child". Please think about the child named above when answering these questions.

Parent Educational  
Expectations

This first set of questions is about how you are thinking about your child's education.

8. If there were no barriers or challenges, how far in school would you want your child to go?

*Mark only one oval.*

- Will go to graduate school
- Will go to college
- Will go to vocational, trade or business school
- Will graduate from high school
- Won't finish high school

9. As things stand now, how far in school do you expect your child will go with their education?

*Mark only one oval.*

- Will go to graduate school
- Will go to college
- Will go to vocational, trade or business school
- Will graduate from high school
- Won't finish high school

10. Parents differ in how much they talk to their children about future education and future jobs or careers. About how often in the past year did you talk with your child about their future education?

*Mark only one oval.*

- Never
- Once
- Twice
- Three or four times
- More than 4 times

11. About how often in the past year did you talk with your child about careers or jobs they might be interested in?

*Mark only one oval.*

- Never
- Once
- Twice
- Three or four times
- More than 4 times



12. How often do you read to your child?

*Mark only one oval.*

- Every day
- A couple times a week
- Once a week
- A couple times a month
- Rarely
- Never

Child Social and Emotional Development

13. For each of the behaviors listed below, please rate whether they happen Rarely, Occasionally, Frequently, or Almost always, for your child.

*Mark only one oval per row.*

	Rarely	Occasionally	Frequently	Almost Always	Don't Know / Cannot Rate
<b>Is comfortable sharing feelings in a culturally appropriate way.</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Understands his or her own strengths or weaknesses.</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Is able to explain why he or she said or did something.</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Expresses feelings that are appropriate to the situation.</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Can control his or her behavior when angry, frustrated, disappointed, or excited.</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Accepts when things don't go his or her way.</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Responds constructively to being corrected by adults.</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Stays on task even with distractions.</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Responds with empathy to others</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**who are upset.**

---

**Respects other people's viewpoints.**

---

**Respects the property of others.**

---

**Notices and compliments others' accomplishments.**

---

**Works well with others.**

---

**Joins peer groups activities smoothly.**

---

**Resolves disputes constructively.**

---

**Gets along well with adults.**

---

**Shows the ability to decide between right and wrong.**

---

**Takes responsibility for his/her own actions.**

---

**Responds appropriately to negative peer pressure.**

---

**Follows rules.**

---

14. Is your family currently saving for your child's future education (this includes any education or career training after high school)? By "your family" we mean you, your spouse or partner, or extended family such as grandparents, guardians, godparents, or aunts and uncles.

*Mark only one oval.*

Yes

No     *Skip to question 20*

Planning for Future Education, con't

15. Please tell us if your family is using any of these to save for your child's future education (this includes any education or career training after high school):

*Mark only one oval per row.*

	Yes	No
<b>U.Fund College Investing Plan 529 account</b>	<input type="radio"/>	<input type="radio"/>
<b>Baby Steps</b>	<input type="radio"/>	<input type="radio"/>
<b>Fidelity Rewards Visa</b>	<input type="radio"/>	<input type="radio"/>
<b>Coverdell Education Savings Account (ESA)</b>	<input type="radio"/>	<input type="radio"/>
<b>Checking account at a bank or credit union</b>	<input type="radio"/>	<input type="radio"/>
<b>Savings account at a bank or credit union</b>	<input type="radio"/>	<input type="radio"/>
<b>Mutual fund</b>	<input type="radio"/>	<input type="radio"/>
<b>Stocks or bonds</b>	<input type="radio"/>	<input type="radio"/>
<b>Certificates of deposit (CDs)</b>	<input type="radio"/>	<input type="radio"/>
<b>Roth IRAs</b>	<input type="radio"/>	<input type="radio"/>
<b>Other</b>	<input type="radio"/>	<input type="radio"/>

16. By the time your child is 18, how much do you expect you will have saved for their future education (this includes any education or career training after high school)?

*Mark only one oval.*

- \$0-\$500
- \$501-\$5,000
- \$5,001-\$10,000
- More than \$10,000

17. In the past 12 months, how many deposits into any type of account have you, family members or friends made for your child's future education (this includes any education or career training after high school)? Give your best estimate.

*Mark only one oval.*

- None
- 1-5 deposits
- 6-10 deposits
- More than 10

18. In total, about how much money has your family currently set aside for your child's future education (this includes any education or career training after high school)? Give your best estimate.

*Mark only one oval.*

- \$0
- \$1-\$500
- \$501-\$5,000
- \$5,001-\$20,000
- More than \$20,000

19. To what extent do you think that people in your community are saving for their children's future education?

*Mark only one oval.*

- Few people in my community are saving
- Some people in my community are saving
- Most people in my community are saving
- Nearly everyone in my community is saving

### Overall Life Satisfaction

20. With 4 being very satisfied and a 1 being very dissatisfied, in general, how satisfied are you with your life?

*Mark only one oval.*

- 4 - Very satisfied
- 3 - Somewhat satisfied
- 2 - Somewhat dissatisfied
- 1 - Very dissatisfied

### Financial Well-Being

This next set of questions is about how you manage your general finances for your household.

21. Do you currently have a personal budget, spending plan or financial plan?

*Mark only one oval.*

- Yes
- No

22. Do you currently have an automatic deposit or electronic transfer set up to put money away for a future use (savings)?

*Mark only one oval.*

Yes

No

23. Do you, or does anyone in your household, currently have a...

*Mark only one oval per row.*

	Yes	No
<b>checking account?</b>	<input type="radio"/>	<input type="radio"/>
<b>savings account?</b>	<input type="radio"/>	<input type="radio"/>

24. In the past 12 months, did you or anyone in your household...

*Mark only one oval per row.*

	Yes	No
<b>have a payday loan?</b>	<input type="radio"/>	<input type="radio"/>
<b>pawn an item because cash was needed (do not count selling unwanted items)</b>	<input type="radio"/>	<input type="radio"/>
<b>take out a tax refund loan</b>	<input type="radio"/>	<input type="radio"/>
<b>have a rent-to-own agreement?</b>	<input type="radio"/>	<input type="radio"/>



This next set of questions asks about pressures on your family's finances. Please indicate whether you strongly agree, agree, disagree, or strongly disagree with each of the following statements about your family's financial situation.

25. My family has enough money to afford the kind of...

*Mark only one oval per row.*

	Strongly agree	Agree	Disagree	Strongly disagree
<b>home we need</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>clothing we need</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>furniture or household equipment we need</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>food we need</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>medical care we need</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

26. Which of the following ranges best represents your total household income from all sources before taxes and other deductions in calendar year 2020? Please include all income such as income from work, investments and alimony.

*Mark only one oval.*

- \$15,000 or less
- \$15,001 – \$55,000
- \$55,001 – \$75,000
- \$75,001 – \$150,000
- More than \$150,000

27. Which of the following ranges best estimates your total household net worth in calendar year 2020? (Net worth is the amount by which your assets, including the value of your home, are larger than your debts.)

*Mark only one oval.*

- Less than \$0 (debts are larger than assets)
- \$0
- \$1 - \$10,000 (assets are larger than debt)
- \$10,001 - \$55,000
- More than \$55,000

28. What is your current living situation?

*Mark only one oval.*

- Own (pay mortgage towards or own your home)
- Rent
- Live with someone else (doubled up)
- Homeless

### Your Child's Academic Performance

29. Last school year, how would you describe your child's overall school performance?

*Mark only one oval.*

- Very poor
- Below average
- Average
- Above average
- Excellent

## Health and Well-Being

30. In general your child's health is...

*Mark only one oval.*

Excellent

Very good

Good

Fair

Poor

31. Generally, how would you rate your own health?

*Mark only one oval.*

Excellent

Very good

Good

Fair

Poor

32. Think about the past 30 days and the feelings you have experienced even if they were out of the ordinary for you. For each description, please indicate how often you have felt this way.

*Mark only one oval per row.*

	None of the time	Some of the time	Most of the time	All of the time
<b>I felt depressed</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>I felt lonely</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>I had crying spells</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>I felt sad</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Boston Saves  
Program Feedback

The next questions ask about your engagement with the Boston Saves program.

33. Does your child have a Boston Saves savings account?

*Mark only one oval.*

- Yes
- No
- Don't know / Not sure

34. How did you first learn about Boston Saves? (Select all that apply).

*Check all that apply.*

- I have never heard of Boston Saves
- From my child's school newsletter
- Family champion
- Friend or family member told me about it
- Robocalls or texts
- Emails
- During pre-school registration process
- Announcement from the Mayor or Superintendent
- Countdown to Kindergarten events
- The "Learning Cohort" event
- Parent-Family Council
- Social Media
- Boston Saves website
- I called or emailed someone at Boston Saves
- Other: \_\_\_\_\_

35. Have you logged into the "Savings Center" for your Boston Saves account?

*Mark only one oval.*

- Yes
- No
- I tried but it didn't work

36. Have you linked your Boston Saves account with your personal bank account information?

*Mark only one oval.*

- Yes
- No
- I tried but it didn't work

37. Did you have any trouble logging in or linking your Boston Saves account?

*Mark only one oval.*

- Yes
- No
- I haven't tried

38. If yes, please describe

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Please indicate whether you are aware of each of the features of your Boston Saves account listed below.

39. Have you heard of Boston Saves family champions? Family champions are community members who work with Boston Saves to share information about Boston Saves at different school events or more generally with other members of your community.

*Mark only one oval.*

- Yes
- No

40. Did you know each account starts with a \$50 deposit from the City of Boston?

*Mark only one oval.*

- Yes
- No

41. Did you know you can earn \$25 in “Boston Saves Dollars” when you link a financial account to your child’s Boston Saves account?

*Mark only one oval.*

Yes

No

42. Did you know you can earn \$5 in “Boston Saves Dollars” for every \$25 saved in a three-month period?

*Mark only one oval.*

Yes

No

43. Did you know you can earn \$25 in “Boston Saves Dollars” by completing a “Financial Checkup”?

*Mark only one oval.*

Yes

No

44. Did you know you can earn \$5 in “Boston Saves Dollars” each quarter for reading with your child regularly (20 days per month in a three-month period)?

*Mark only one oval.*

Yes

No

45. Did you know, if you do not have a bank account or 529 account, you can set up a special custodial account that does not require a social security number or identification card?

*Mark only one oval.*

- Yes
- No

46. Which of the following incentivized activities have you already participated in? (Select all that apply).

*Check all that apply.*

- Earned dollars by linking my financial account to my child's Boston Saves account
- Earned dollars by saving \$25 over a three-month time period
- Earned dollars by completing the Financial Check-Up
- Earned dollars by reading to my child regularly
- None

47. How often do you log in to check the balance in your Boston Saves account?

*Mark only one oval.*

- About once per week
- About once per month
- About once every 2 or 3 months
- Twice per year
- Once per year
- Never
- Don't know how



48. Have you experienced any barriers or challenges in using the Boston Saves account? (Select all that apply).

*Check all that apply.*

- I don't trust that it is a free program
- I don't have a bank account, savings account, or 529 account to link to
- Logging in to the Savings Center is not easy
- Linking to my bank account is not easy
- The Boston Saves incentivized activities are too small to make it worth my time
- It is too difficult to earn the Boston Saves Dollars
- Other: \_\_\_\_\_

49. What can we do to make the Boston Saves program easier to use or more useful to you?

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50. What kinds of training, resources or support would be most helpful to you and your family related to preparing for your child's future education, supporting your child's academic success, managing finances, etc.?

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Parent Information

51. What is your relationship to your child?

*Mark only one oval.*

- Biological parent
- Adoptive parent
- Stepparent
- Guardian
- Other: \_\_\_\_\_

52. What is your current marital status?

*Mark only one oval.*

- Married
- Living together as married
- Divorced
- Separated
- Never married
- Widowed

53. Are you Hispanic or Latinx?

*Mark only one oval.*

- Yes
- No

54. Which of the following choices best describes your race? (Select all that apply).

*Check all that apply.*

- White
- Black or African American
- Asian
- Native Hawaiian or other Pacific Islander
- American Indian or Alaska Native
- Other

55. What is the highest level of education you have completed?

*Mark only one oval.*

- Some high school
- High school diploma, GED, or alternative high school credential
- Certificate or diploma for a school that provides occupational training
- Some college
- Associate's degree
- Bachelor's degree
- Some graduate school
- Master's degree
- Ph.D., M.D., law degree, or other high-level professional degree

56. Which of the following best describes your current employment status: (Select all that apply).

*Check all that apply.*

- Full-time employed
- Part-time employed
- Unemployed and currently looking for work
- Unemployed and currently not looking for work
- Unable to work (disabled)
- Homemaker
- Student
- Retired
- Other: \_\_\_\_\_

Untitled Section

57. Thank you very much for taking the time to complete this survey. Your responses are so important to helping the City of Boston and Boston Public Schools develop and improve programming to support the well-being of the children and families served. If you wish to add any comments or further explain any of your answers or provide general feedback on this survey, please do that here.

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Untitled Section

Please submit your contact information for a chance to win one of 81 \$100 Amazon gift cards—one gift card for respondents from each of 81 participating schools in Boston.

58. Last Name: \_\_\_\_\_

59. First Name:

---

60. Email Address:

---

61. Phone:

---

62. Home Address:

---

63. Child's Name

---

64. School Name (where your child is enrolled)

---

Please click "Submit" to submit your responses.

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