SEED for Oklahoma Kids: The Impact Evaluation

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1. INTRODUCTION AND BACKGROUND

Some 20 years ago, Michael Sherraden observed that the poor could not equitably benefit from tax breaks, such as employer-sponsored retirement plans and deductions for interest on mortgage payments, which were available to people with means. He proposed the idea of assets for the poor—namely, those who are poor should have the same opportunity as those with more wealth to accumulate assets with public support.¹

Instead of focusing welfare policy on income and consumption, as we have done in the past, we should focus more on savings, investment, and asset accumulation. This idea ... suggests that poor people, if they are to overcome their poverty—not only economically, but also socially and psychologically—must accumulate a stake in the system .... I refer to this new thinking as asset-based welfare policy. Instead of merely providing subsistence, asset-based welfare policy would seek to integrate social policy with economic development.

Michael Sherraden conceived of Individual Development Accounts (IDAs), which would provide to the poor the same opportunities for publicly supported asset accumulation that are available to households that are not poor. A subsequent strand of assets for the poor emerged as Child Development Accounts, which are savings accounts that begin as early as birth and allow parents and children to accumulate savings for postsecondary education, homeownership, or business initiatives.²

Drawing on a legacy of support for vulnerable populations and consistent with its mission to reduce poverty and advance human achievement, the Ford Foundation is supporting the Saving for Education, Entrepreneurship, and Downpayment (SEED) initiative. SEED is a multifaceted national effort to develop and test matched savings accounts for children and youth. The initiative seeks to set the stage for universal, progressive asset-building policy. National partners of the SEED Policy and Practice Initiative include the Ford Foundation, Corporation for Enterprise Development, the Center for Social Development at Washington University, the University of Kansas School of Social Welfare, the New America Foundation, and the Aspen Institute Initiative on Financial Security.

SEED accounts are similar to IDAs. They are savings accounts subsidized through deposits and matches. Withdrawals are limited to specific investments, such as paying for education. While IDAs focus on adults, SEED accounts focus on children. SEED accounts are long-term savings and investment accounts opened in a child’s name. They begin with an initial

deposit used to “seed” an account to which family members, friends, accountholders, and others may add over time. The theory behind the SEED program is that long-term investment has the potential to produce a wide range of benefits, including:

- **Future financial resources.** For example, a deposit of $50 per month starting at birth will grow to about $20,000 (assuming 7% interest) by the time the child reaches age 17.³

- **Greater earnings from wages due to higher levels of education.** Median weekly earnings for a high school graduate are $653, while for a college graduate median weekly earnings are $1,158.⁴

- **Psychosocial benefits.** The ability to have savings, purchase a home, and engage in financial planning can have positive effects on individuals, their families, and their communities.

Several SEED initiatives and research studies are informing program planners and policymakers interested in asset development, including lessons from 12 community-based organizations with diverse missions and constituencies,⁵ an account-monitoring study that tracked savings behaviors of participants at the community sites,⁶ an impact evaluation of SEED for children enrolled in Head Start,⁷ and in-depth interviews and surveys with participants and parents.⁸

**SEED for Oklahoma Kids**

SEED for Oklahoma Kids (SEED OK) is the largest effort to date of the SEED Policy and Practice Initiative. Led by Michael Sherraden and Margaret Clancy at the Center for Social Development (CSD) at Washington University, funded primarily by the Ford Foundation, and developed in collaboration with members of the SEED research team (listed in Exhibit 1-1), SEED OK uses an approach known as a *universal model*, which provides a children’s savings account to all members of a defined population. SEED OK is a demonstration program to (1) identify issues that need resolution for a full-scale, universal system of children’s savings accounts and (2) determine the impacts on children and families.

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SEED Initiative Partners
- Center for Social Development (CSD) at Washington University in St. Louis
- Corporation for Enterprise Development (CFED)
- University of Kansas School of Social Welfare
- University of Michigan
- New America Foundation
- Initiative on Financial Security at the Aspen Institute

SEED OK Partners
- Oklahoma State Treasurer’s Office
- Oklahoma State Department of Health
- Oklahoma Department of Human Services
- Oklahoma Tax Commission
- TIAA-CREF, Tuition Financing Inc.

Funders
- Ford Foundation
- Charles Stewart Mott Foundation
- Lumina Foundation for Education
- Charles and Helen Schwab Foundation
- Jim Casey Youth Opportunity Initiative
- Citi Foundation
- Ewing Marion Kauffman Foundation
- Richard and Rhoda Goldman Fund
- MetLife Foundation
- Evelyn and Walter Hass, Jr. Fund
- Edwin Gould Foundation for Children
- W.K. Kellogg Foundation

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- Benita Melton – Charles Stewart Mott Foundation
- Paul Ong – UCLA School of Public Affairs
- Robert Plotnick – Daniel J. Evans School of Public Affairs, University of Washington
- Christine Robinson – Stillwater Consulting
- Barbara Robles – Board of Governors of the Federal Reserve System
- Trina Shanks – University of Michigan
- Michael Sherraden – Center for Social Development at Washington University in St. Louis

SEED OK planners selected specific principles for the initiative:

- the demonstration will rely on an existing policy structure (i.e., it will not build any new entities or savings plans);
- the demonstration will use an experimental research design to randomly assign participants into groups with and without savings accounts, which means any measured differences can be attributed to SEED;
- it will test the effects of establishing a savings account at birth; and
• the research will be longitudinal, meaning that families will be tracked over time and the impacts of the savings account will be ascertained at various points in the target child’s life.

Oklahoma was selected through a competitive procurement process to be the site of the demonstration project, which was originally called the “SEED Universal Model.” Using the Oklahoma College Savings Plan (the state’s 529 plan) as the underlying structure, research will ascertain whether universal children’s savings accounts can be successfully opened and their impact.

Design of the SEED for Oklahoma Kids Experiment

Initiating the SEED OK research study involved four tasks: establishing the research questions, planning the research design, identifying the sample frame, and collecting data. The first two tasks are discussed briefly below. The latter two are discussed in Chapter 2.

The Research Questions

As noted above, the primary purpose of the SEED OK research study is to test the efficacy and inform policy for a universal, progressive system of children’s savings accounts, a long-standing goal of many involved with the field. SEED OK planners designed an initiative to answer the following overarching questions:9

1. What are the patterns of participation in SEED OK?
2. How much is saved in SEED OK?
3. What are the separate impacts of matching contributions on SEED OK participation and saving behavior?
4. What factors facilitate saving, and what factors are barriers to saving in SEED OK?
5. What impacts did SEED OK have on saving for children, other savings, and other assets and liabilities?
6. What are the impacts of SEED OK on parents’ expectations and behaviors regarding children’s education and life chances?
7. What are the impacts of SEED OK on children’s cognitive, emotional, and social development, and their attitudes and behaviors regarding education?

These questions were expanded and specified in the SEED OK Request for Proposals for an independent impact evaluation, which RTI International was selected to conduct. The impact evaluation is the focus of this document10 the impact evaluation’s research questions are presented in Exhibit 1-2.

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10 The Center for Social Development is conducting additional research studies that will rely on survey data, information from the SEED OK accounts, and in-depth interviews with study participants.
### Exhibit 1-2.  **SEED OK Research Questions**

#### Participation
- How many people opened SEED accounts?
- How much is accumulated in the SEED accounts?
- What are the patterns of deposits into SEED accounts?
- Who contributes to SEED accounts?
- Have there been any withdrawals? If so, when and for what purpose?

#### Predictors of asset accumulation in SEED accounts
- How do demographic variables affect asset accumulation?
- How do other variables affect asset accumulation?

#### Impacts of SEED on parents

Relative to parents of children in the control group, do SEED parents ...
- have greater future orientation (time horizon, value saving)?
- have greater financial knowledge?
- have better money management (monitor spending, spend efficiently, save regularly, and "protect" savings)?
- save more for children (in general, and for postsecondary training and education)?
- feel more positive about the future, both the financial situation and the child’s future?
- have better mental health (less likely to be depressed, greater self-esteem)?
- place greater value on parenting and feel more positive about parenting (greater self-efficacy, less aggravation)?
- place greater value on child’s education (value higher education for child, take responsibility for child’s learning, expectations for child’s education)?
- make greater investments in child’s cognitive development (regulate child’s TV viewing, encourage reading, provide enriching experiences outside the home)?

Are parent outcomes stronger when asset accumulation in SEED accounts is greater?

#### Impacts of SEED on participants

(to be determined when children are about 7 years old)

Relative to children in the control group, do SEED children ...
- show greater school engagement (in attendance, relationships with teachers, eagerness to learn)?
- show greater cognitive ability (in numeracy, literacy, verbal language skills)?
- have better academic performance (grades, test scores)?
- have more positive social and emotional development (self-esteem, self-efficacy, behavior)?
- have higher educational aspirations?
- have greater financial knowledge?
- place greater value on saving?

Are child outcomes stronger when asset accumulation in SEED accounts is greater?


### The Demonstration Design

SEED OK planners envisioned a study that would truly test the benefits of a universal system of savings accounts for children, which would be established at birth. Originally, they had expected to identify a group of newborns who would automatically receive a college savings account unless parents specifically and consciously chose to opt out of the program. Once SEED OK was underway, however, the planners encountered a practical consideration—namely, that a newborn’s Social Security number (SSN) would be necessary...
to open any savings account, which led to a change in the research design. The only feasible option was to draw a sample, contact the parent, and ask for the child’s SSN.¹¹

SEED OK designers chose an experimental design wherein participants would be randomly assigned to either a treatment or a control group. Treatment group members would receive a $1,000 initial deposit into the Oklahoma College Savings Plan for the newborn; control group members would not. Low-income treatment group members would also have the opportunity to earn additional funds through matches on deposits into accounts for the newborn. Random assignment means that any measured differences between treatment and control group members can be attributed to the intervention—in this case, the account, the deposit, and any matching funds.

We note that findings from SEED OK cannot be generalized to the entire population of Oklahoma¹² for two reasons: (1) not all families selected for the experiment could be located and (2) of those who were located, some declined to participate, thus introducing the likelihood of selection bias. The first reason is somewhat manageable because the source of the sample—birth records—provides demographic characteristics that can be used to compare the located and the unlocated (the sampling procedures are discussed in Chapter 2). The second is of more concern because families who self-selected into the study (by, say, consenting to give their child’s SSN) may differ from those who did not in ways that are not measured but are correlated with the effectiveness of the intervention. We do not know why people did not join the experiment—perhaps they did not understand the program, did not want perceived government largesse, did not want to disclose personal information, thought it took too much effort, were suspicious, or thought they would not benefit from participating. It is reasonable to infer that those who expected to benefit the most self-selected into the experiment, whereas those who expected to benefit the least did not. In short, SEED OK is universal in that every family who agreed to participate in the study and was assigned to the treatment group received a SEED account, but it is not truly universal because some individuals chose not to participate in the study and hence were not eligible to receive the SEED account.

The overall approach to the impact evaluation is presented in the logic model depicted in Exhibit 1-3. It shows SEED OK’s underlying assumptions, program inputs and activities, and results, and it describes expected short-, medium-, and long-term outcomes.¹³ This SEED OK impact evaluation is measuring primarily short-term outcomes—those in the 1- to 5-year range, which is appropriate for the duration of the experiment and the age of the focal child.

¹¹ SEED OK researchers identified and examined several alternative methods for getting the child’s Social Security number, including an appeal to the Social Security Administration. In the end, the only practical solution that enabled the study to retain random assignment and plans to open accounts was to get the child’s Social Security number directly from the parent during data collection.

¹² Findings from the SEED OK impact evaluation should not be considered as generalizable to the rest of the country.

¹³ These assumptions and terms are explained in Chapter 3.
Medium- (5 to 15 years) and longer-term impacts will be assessed in later years if funds are available to support evaluation research.

**Outline of the Report**

The following sections correspond to the research questions. Chapter 2 reviews the research methods, and Chapter 3 provides an overview of the SEED OK program. The next three chapters discuss financial outcomes of the initiative: Chapter 4 regarding account ownership, Chapter 5 regarding account balances, and Chapter 6 regarding savings impacts. Chapter 7 discusses psychosocial impacts. The report ends with conclusions and observations.
Exhibit 1-3. SEED OK Impact Evaluation Logic Model

**Assumptions**
- Parents want to save for themselves and their children.
- Matching funds can stimulate savings.
- Parents want their children to attend college.

**Program Features**
- SEED OK Program
  - OK Treasurer’s office
  - Staff
  - Initial deposit
  - Matched deposits
  - Waived minimum deposit
  - Waived asset limits

**Inputs**
- Funding

**Activities**
- Open SEED OK accounts
- Encourage opening of own OCSP account
- Administer match
- Participant contributes to SEED OK
- Participant contributions matched
- Total savings in SEED OK

**Results**
- Short term (1 to 5 years):
  - Place greater value on education
  - Better future outlook
  - Increased savings for children
  - Greater interest in saving

- Medium term (5 to 15 years):
  - Increased educational aspirations
  - More positive social/emotional development
  - Increased household assets
  - Increased financial knowledge
  - Greater value on saving

- Longer term (for children as they become adults):
  - More positive outlook on life
  - Greater cognitive ability
  - Increased college attendance
  - Increased earning potential
  - General asset building
  - Increased fiscal responsibility
  - Greater value on saving

**Sources of Participant SEED OK Contributions**
- Open OCSP account
- Contribution match
- Liquidate non-liquid assets
- Shifting of resources
- New sources of income
- New household spending
- New sources of investment
- New resources for investment
- Move funds from other education savings vehicles
- Move funds from other general savings vehicles

**Anticipated Beneficial Outcomes**
- Stronger outcomes with higher savings

*Only represent a general time frame when these outcomes would be expected.*
2. RESEARCH METHODS

SEED for Oklahoma Kids planners had several goals when designing the impact evaluation experiment. The primary goal was to measure the impact of a universal model of child development accounts established at birth. The design also sought to ensure that any findings could be generalized to the population and that researchers could measure the impact of SEED OK for particular racial and ethnic groups. To accomplish these goals, the experiment consists of the following key features:

1. A representative sample of newborns was drawn from births in Oklahoma, with oversampling of three racial/ethnic groups of interest.
2. Baseline interviews were conducted, after which survey respondents were randomly assigned to a treatment or control group.
3. The intervention known as SEED OK was given to treatment group members; no services were given to control group members.
4. Follow-up interviews were conducted 3-1/2 years later.

The following sections provide an overview of the sampling process and random assignment to treatment and control groups. They then provide a description of the baseline and follow-up survey instruments (contained in Appendix A and Appendix B), data collection methods, and data collection results. The end of the chapter provides an overview of the analytical methods used in the report.

The Sample

After evaluating various sampling design options and discussing them with SEED OK planners, RTI developed a sampling plan that balances factors such as resources, statistical power, subgroup analysis, and fidelity to concepts embedded in the universal model designed by SEED planners. The result is a stratified random sample of newborns in Oklahoma, with oversampling of African Americans, American Indians, and Hispanics. Sample members who completed both the baseline and follow-up survey constitute the final analysis sample. Exhibit 2-1 provides an overview of this process.

The Sample Frame

SEED OK used a sampling frame of birth certificate records from the Oklahoma State Department of Health (OSDH). Balancing the need for a sufficient sample size and the desire to conduct the baseline interview as close to the birth of the child as possible, the sample was drawn from births during two 3-month time periods. RTI wrote the sampling specifications, which OSDH executed.
Exhibit 2-1. Overview of SEED OK Sample

Note: Response rates account for 182 ineligible sample members at baseline and 38 ineligible sample members at follow-up.

Geographic Stratification

The SEED OK design indicated that the study should be able to generalize results to the State of Oklahoma, so a sample needed to be drawn that was representative of the state. Sampling statisticians generally weigh considerations such as diversity of the population (e.g., urban/suburban/rural location or racial/ethnic groups) against the practical realities of collecting data. Weighing these considerations, planners chose to allocate the sample to the 3-digit ZIP code strata proportional to their size (that is, the number of births during the target sampling period).

Oversampling Racial and Ethnic Groups of Interest

SEED planners were interested in the impact of SEED OK on three racial and ethnic groups: African Americans, American Indians, and Hispanics. A sample drawn only on the basis of

\footnote{For example, an in-person survey could increase the efficiency of its data collection by selecting a clustered sample where sample members reside in several designated geographic areas (clusters), rather than equally spread across the state.}
these groups’ proportions as they occurred naturally in the population would not produce sufficient statistical power to analyze the impact of SEED OK on them. Oversampling these groups is an option, but it is not without drawbacks. When a sample has a distribution that deviates from the population, weighted analyses are necessary to develop estimates and inferences. But the very need to weight the data results in a negative impact on statistical power, referred to as an unequal weighting effect (UWE). The more oversampling, the more variable the weights, leading to a larger reduction of statistical power due to UWE. Thus, the SEED OK sample needed to oversample the three groups of interest to the degree necessary to measure impacts while simultaneously minimizing the unequal weighting effect.

Sample Size

Many factors had to be considered in determining the initial sample size for SEED OK, including the sampling frame, available resources, and the ability to statistically measure differential outcomes for treatment and control group members—that is, whether there is sufficient statistical power to detect measurable differences.

Statistical power is influenced by several factors, including the sample size, the unequal weighting effect, and the magnitude of the effect being measured. Because the magnitude of the effect for SEED OK was unknown, RTI looked for studies similar to SEED OK to provide an estimate of differences that might be expected between treatment and control groups. We used data from two variables measured in the American Dream Demonstration (ADD): the amount in educational accounts for children and the amount of parents’ savings set aside for their children’s education. Based on the expected effect size, RTI conducted power analyses that examined statistical power for several sample size and selection scenarios. Our analysis examined three different sample sizes with either moderate or no oversampling at baseline (2,000, 2,353, and 2,941) to achieve samples sizes of 1,700, 2,000, and 2,500 at follow-up. The analysis suggested that the loss in power owing to a smaller sample size is not dramatic when the magnitude of the effect is reasonably close to that seen in the ADD data. However, differences in power would be more pronounced if the effect differs greatly from that seen in ADD. We determined that a final analytical sample size of 2,500 with moderate oversampling of subgroups (17% of the sample African American, 17% American Indian, and 19% Hispanic)


16 During the development of the sampling plan, we looked for but found no studies that estimated the effect size of Child Development Accounts (CDAs) on psychosocial measures relevant to SEED OK, so we were not able to take this into account when calculating the sample size. Thus, the sample size may not provide sufficient power for measuring some psychosocial impacts.
would provide satisfactory statistical power for the overall sample, and not as satisfactory but still potentially effective power for subgroup analysis. This decision was a compromise, aiming to meet the top priority of power for impact estimates in the overall sample while providing informative impact estimates for the subgroups.

Based on expected response rates of 85% for the baseline and follow-up surveys, an original sample of 3,676 was drawn from OSDH records. During the baseline survey data collection, initial response rates were significantly lower than originally anticipated. Several factors contributed to the lower than expected response rate, such as the need to obtain the focal child’s Social Security number (which many sample members did not want to provide) and an immigration bill that purportedly led to some number of Hispanic families leaving the state or removing themselves from government-associated operations at the time the baseline survey was being fielded, which made these sample members particularly difficult to locate and interview.

A high non-response rate would have reduced the final analysis sample size and the statistical power for the analyses, especially for the racial/ethnic groups of interest. In consultation with members of the SEED Research Advisory Council, SEED researchers determined that a second sample should be drawn to obtain a larger overall sample. The supplement added 3,652 newborns from a second 3-month period (nearly adjacent to the first 3-month period) to result in a baseline survey sample size and allocation equal to the original targets.

Final Sample

As shown in Exhibit 2-1, the SEED OK sample consists of 2,704 baseline respondents; 2,268 of these respondents completed the follow-up survey. If at follow-up a focal child no longer lived with the baseline respondent, we attempted to interview both the baseline respondent and the focal child’s new caregiver. A total of 31 new caregivers participated in the follow-up survey, and another 17 baseline respondents who were no longer the focal child’s primary caregiver completed a shortened version of the follow-up survey. Although the final sample size achieved was smaller than originally planned, power analyses show only minimal reduction in power.

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19 Weights for a supplemental sample would potentially need to reflect that all births selected for the supplemental sample were not selected for the initial sample. As a result, the weights would be much larger than that of the initial sample. Because the two samples were selected within a very short time period, there is no reason to believe the newborns selected in the initial sample are meaningfully different from those selected for the supplemental sample. To simplify the process and reduce the variability of the weights, we assume all were selected at the same time from the same population.
Analysis Sample

For each analysis presented in this report, the sample consists of all study participants who (1) were the primary caregiver for the focal child at the time of the baseline and follow-up surveys, (2) completed both the baseline and follow-up surveys, and (3) provided a valid answer to the questions used in the particular analysis. Analyses presented in this report do not use data from new caregivers who were interviewed for the follow-up survey (n = 31). We based this decision on several factors, the first of which is the absence of baseline survey information. Because new caregivers did not participate in the baseline survey, analysts cannot accurately measure bias that could have been introduced by baseline differences between treatment and control group members. The second factor is the likelihood of wide variance in the duration of their new caregiver role. The third factor is the relatively small number of new caregivers. Because the number of new caregivers is small, any analyses incorporating them would produce such small cell sizes that analysis would be impossible. Moreover, combining the small number of new caregivers with other caregivers could introduce additional potential bias.

Response Rates

Data for SEED OK were collected through telephone surveys of mothers of the sampled newborns. RTI programmed the surveys for computer-assisted telephone interviewing (CATI), which allows consistency checks to be built into the instrument and prompts interviewers to correct inconsistencies while the respondent is still on the phone. The baseline survey was conducted in the fall and winter of 2007–2008. The follow-up survey was launched during spring 2011, when focal children were 3-1/2 to 4 years old.

If we were unable to reach a sample member by telephone, the case was assigned to field representatives who attempted to locate and then visit the sample member’s home to encourage participation. Field representatives offered sample members a cell phone to use to call RTI and conduct the survey in case lack of phone access had hindered study participation. Additionally, for the follow-up survey, we attempted to contact sample members through email and Facebook messages to encourage survey participation.20

To reduce attrition between the baseline and follow-up surveys, RTI conducted sample maintenance activities every 6 to 10 months. We attempted to locate all sample members and asked them to either confirm or update basic contact information (name, address, and telephone number). Overall, these efforts were successful at locating sample members, resulting in location of 80% or more of the baseline sample at each round of sample maintenance.

Baseline telephone interviews were completed with 2,704 eligible respondents from the sample of 7,328 birth records, for a response rate of 38.2%, computed according to guidelines from the American Association for Public Opinion Research. The results are presented in Exhibit 2-2. Surveys were conducted in English (n = 2,486) and Spanish (n = 218). On average, they lasted about 43 minutes. The shortest one was completed in 21 minutes; the longest interview was 84 minutes. To determine whether survey respondents are different from non-respondents, we used data from OSDH birth records (including race, age, education, and location) to examine non-response bias using a generalized exponential model (GEM). This analysis showed only minor sources of bias, indicating that any weighting to adjust for non-response would not be harsh. A full discussion of the baseline data collection procedures and response rate is presented in the baseline report.

**Exhibit 2-2. SEED OK Baseline and Follow-up Survey Participants**

<table>
<thead>
<tr>
<th>Description</th>
<th>Baseline</th>
<th>Follow-up</th>
</tr>
</thead>
<tbody>
<tr>
<td>completed full interview</td>
<td>2,704</td>
<td>2,251</td>
</tr>
<tr>
<td>baseline respondents who no longer live with the focal child and completed a shortened version of the follow-up interview</td>
<td>0</td>
<td>17</td>
</tr>
<tr>
<td>refusal or break-off (telephone calls made to the sample member but no interview was completed)</td>
<td>3,460</td>
<td>60</td>
</tr>
<tr>
<td>not locatable (the sample member did not reside at the given address or phone number)</td>
<td>982</td>
<td>338</td>
</tr>
<tr>
<td>ineligible cases</td>
<td>182</td>
<td>38</td>
</tr>
</tbody>
</table>

Follow-up telephone interviews were completed with 2,268 eligible respondents, for a response rate of 85.24%. Thirty-eight baseline respondents were ineligible for the follow-up survey. Ineligible sample members included cases where the sample member or focal child had died since the baseline interview, the sample member was incarcerated, or the

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21 The American Association for Public Opinion Research (AAPOR). (2008). *Standard definitions: Final dispositions of case codes and outcome rates for surveys* (3rd ed.). Lexena, KS: AAPOR. Because AAPOR does not have standard definitions for telephone surveys with a list sample, such as the SEED for Oklahoma Kids survey, we synthesized definitions from AAPOR guidance for random digit dial telephone surveys, in-person household surveys, and mail surveys of specifically named people. The computation is for AAPOR’s Response Rate 3.


25 Only baseline respondents are included in this response rate calculation. New caregivers are not included.
sample member was institutionalized. Only 42 baseline respondents actively declined to participate in the follow-up survey. At follow-up, surveys were again conducted in English and Spanish. On average, they lasted 39 minutes. The shortest one was completed in 23 minutes; the longest interview was 92 minutes.

**Random Assignment**

Sample members who completed the baseline telephone survey were randomly assigned to treatment (n = 1,358) and control (n = 1,346) groups. Because study participants were randomly assigned to treatment and control groups after they completed the baseline survey, the characteristics and potential outcomes of the two groups should be nearly identical. Our analyses confirmed no significant differences between the two groups; an independent analysis verified this finding. Exhibit 2-3 provides an overview of the baseline sample and a comparison against all births in Oklahoma in 2007. The final weights created for the final analysis data set accounted for sampling probability, survey non-response, and attrition. The weights were then post-stratified to the total universe of births in Oklahoma in 2007. The characteristics of the weighted SEED OK sample closely resemble those of all births in Oklahoma in 2007.

Although study participants were randomly assigned to treatment and control groups after they completed the baseline survey, if the types of sample members who responded to the follow-up survey were distributed unevenly across various categories, results could be biased. We compared follow-up survey respondents in the treatment and control groups across several factors (Exhibit 2-4) and found no significant differences between the two groups on these characteristics. Thus, we conclude that attrition occurred equally across treatment and control group members.

Just as differential attrition rates can affect findings, findings can be biased if non-response for particular survey items is nonrandom across treatment and control group members. To examine the possibility, we analyzed item non-response patterns. For most items in the follow-up survey, item non-response was very low, typically less than 1%. Not unexpectedly, items that asked about the amount of household savings, assets, and debts had higher non-response rates.

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26 Marks et al., op cit.
28 The weighting methodology is fully described in Marks et al., 2008.
### Exhibit 2-3. Characteristics of Baseline Sample, by Treatment vs. Control Group (in percents)

<table>
<thead>
<tr>
<th>Sample Characteristics</th>
<th>Group Sample</th>
<th></th>
<th>SEED OK Sample</th>
<th></th>
<th>All 2007 Births in Oklahoma</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Treatment</td>
<td>Control</td>
<td>Full</td>
<td>Weighted</td>
<td></td>
</tr>
<tr>
<td>sample size</td>
<td>1,358</td>
<td>1,346</td>
<td>2,704</td>
<td>—</td>
<td>54,946</td>
</tr>
<tr>
<td>race</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>African American</td>
<td>16.7</td>
<td>18.1</td>
<td>17.4</td>
<td>8.9</td>
<td>8.9</td>
</tr>
<tr>
<td>American Indian</td>
<td>18.6</td>
<td>19.7</td>
<td>19.2</td>
<td>11.4</td>
<td>11.4</td>
</tr>
<tr>
<td>Hispanic</td>
<td>16.9</td>
<td>17.4</td>
<td>17.2</td>
<td>13.0</td>
<td>13.0</td>
</tr>
<tr>
<td>other (white)</td>
<td>47.7</td>
<td>44.7</td>
<td>46.2</td>
<td>66.7</td>
<td>66.7</td>
</tr>
<tr>
<td>mother’s marital status</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>married</td>
<td>56.5</td>
<td>55.4</td>
<td>55.9</td>
<td>60.0</td>
<td>58.9</td>
</tr>
<tr>
<td>not married</td>
<td>43.5</td>
<td>44.7</td>
<td>44.1</td>
<td>40.0</td>
<td>41.3</td>
</tr>
<tr>
<td>mother’s education level</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>completed less than 12th grade</td>
<td>23.1</td>
<td>23.9</td>
<td>23.5</td>
<td>22.1</td>
<td>22.2</td>
</tr>
<tr>
<td>completed 12th grade</td>
<td>34.9</td>
<td>35.6</td>
<td>35.2</td>
<td>38.1</td>
<td>37.3</td>
</tr>
<tr>
<td>completed some college or more</td>
<td>42.0</td>
<td>40.5</td>
<td>41.3</td>
<td>39.8</td>
<td>40.5</td>
</tr>
<tr>
<td>child’s sex</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>male</td>
<td>53.0</td>
<td>53.1</td>
<td>53.1</td>
<td>53.0</td>
<td>51.1</td>
</tr>
<tr>
<td>female</td>
<td>47.0</td>
<td>46.9</td>
<td>46.9</td>
<td>47.0</td>
<td>48.9</td>
</tr>
</tbody>
</table>

We examined item non-response by treatment and control group members for any item where more than 1% of study members did not give an answer and found no significant differences in terms of propensity to respond to these questions. As an example of the minimal impact of item non-response, Exhibit 2-5 presents two sets of rates for several questions where non-response exceeded 1%, first by the percentage of respondents who did not provide a specific amount, then by the percentage who did not provide either the specific amount or a range. A more detailed discussion of unit and item non-response is found in Appendix C.
### Exhibit 2-4. Characteristics of Treatment vs. Control Group Respondents at Follow-up (in percents)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Treatment</th>
<th>Control</th>
<th>p values</th>
</tr>
</thead>
<tbody>
<tr>
<td>full sample</td>
<td>50.8</td>
<td>49.2</td>
<td></td>
</tr>
<tr>
<td><strong>age</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25 and under</td>
<td>51.1</td>
<td>51.5</td>
<td>.960</td>
</tr>
<tr>
<td>26 to 34</td>
<td>41.5</td>
<td>40.9</td>
<td></td>
</tr>
<tr>
<td>35 and above</td>
<td>7.4</td>
<td>7.6</td>
<td></td>
</tr>
<tr>
<td><strong>gender</strong></td>
<td></td>
<td></td>
<td>.979</td>
</tr>
<tr>
<td>female</td>
<td>98.7</td>
<td>98.7</td>
<td></td>
</tr>
<tr>
<td>male</td>
<td>1.3</td>
<td>1.3</td>
<td></td>
</tr>
<tr>
<td><strong>education</strong></td>
<td></td>
<td></td>
<td>.559</td>
</tr>
<tr>
<td>less than high school</td>
<td>24.6</td>
<td>25.2</td>
<td></td>
</tr>
<tr>
<td>high school diploma</td>
<td>28.3</td>
<td>29.8</td>
<td></td>
</tr>
<tr>
<td>more than high school</td>
<td>47.1</td>
<td>45.1</td>
<td></td>
</tr>
<tr>
<td><strong>race</strong></td>
<td></td>
<td></td>
<td>.455</td>
</tr>
<tr>
<td>African American</td>
<td>16.7</td>
<td>18.1</td>
<td></td>
</tr>
<tr>
<td>American Indian</td>
<td>18.6</td>
<td>19.8</td>
<td></td>
</tr>
<tr>
<td>Hispanic</td>
<td>16.9</td>
<td>17.4</td>
<td></td>
</tr>
<tr>
<td>other (white)</td>
<td>47.7</td>
<td>44.7</td>
<td></td>
</tr>
<tr>
<td><strong>marital status</strong></td>
<td></td>
<td></td>
<td>.924</td>
</tr>
<tr>
<td>never married</td>
<td>35.4</td>
<td>35.8</td>
<td></td>
</tr>
<tr>
<td>married</td>
<td>56.9</td>
<td>56.2</td>
<td></td>
</tr>
<tr>
<td>divorced/separated/widowed</td>
<td>7.7</td>
<td>8.0</td>
<td></td>
</tr>
<tr>
<td><strong>public assistance</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>receive TANF</td>
<td>8.9</td>
<td>9.8</td>
<td>.385</td>
</tr>
<tr>
<td>receive food stamps</td>
<td>38.8</td>
<td>39.9</td>
<td>.562</td>
</tr>
<tr>
<td><strong>poverty</strong></td>
<td></td>
<td></td>
<td>.296</td>
</tr>
<tr>
<td>above federal poverty line</td>
<td>70.8</td>
<td>69.0</td>
<td></td>
</tr>
<tr>
<td>below federal poverty line</td>
<td>29.2</td>
<td>31.1</td>
<td></td>
</tr>
<tr>
<td><strong>housing</strong></td>
<td></td>
<td></td>
<td>.317</td>
</tr>
<tr>
<td>live in public housing</td>
<td>20.1</td>
<td>22.5</td>
<td></td>
</tr>
<tr>
<td>own home</td>
<td>43.2</td>
<td>42.7</td>
<td></td>
</tr>
<tr>
<td>rent home</td>
<td>36.8</td>
<td>34.8</td>
<td></td>
</tr>
<tr>
<td><strong>ratio of adults to children in</strong></td>
<td></td>
<td></td>
<td>.066</td>
</tr>
<tr>
<td>household</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>adults &gt; children</td>
<td>29.09</td>
<td>33.2</td>
<td></td>
</tr>
<tr>
<td>adults = children</td>
<td>33.51</td>
<td>31.1</td>
<td></td>
</tr>
<tr>
<td>adults &lt; children</td>
<td>37.41</td>
<td>35.7</td>
<td></td>
</tr>
</tbody>
</table>

*a All characteristics are as measured at baseline.*
Exhibit 2-5.  Examples of Item Non-response, Treatment vs. Control Group Members

<table>
<thead>
<tr>
<th>Survey Question</th>
<th>% Who Gave No Response</th>
<th>p values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thinking of all the sources of income you have told me about, what was the total income before taxes for your household during 2010?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>did not provide a specific amount</td>
<td>24.2</td>
<td>25.8</td>
</tr>
<tr>
<td>did not provide a specific amount or a range</td>
<td>6.7</td>
<td>7.7</td>
</tr>
<tr>
<td>How much do you have in total in checking accounts?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>did not provide a specific amount</td>
<td>11.8</td>
<td>12.1</td>
</tr>
<tr>
<td>did not provide a specific amount or a range</td>
<td>1.1</td>
<td>1.6</td>
</tr>
<tr>
<td>How much (in savings and assets) in total are earmarked specifically for your child’s college or postsecondary education?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>did not provide a specific amount</td>
<td>15.3</td>
<td>15.9</td>
</tr>
<tr>
<td>did not provide a specific amount or a range</td>
<td>1.4</td>
<td>0.6</td>
</tr>
<tr>
<td>How much is saved for your child’s college education in a college savings plan or 529 plan in the State of Oklahoma called an Oklahoma College Savings Plan?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>did not provide a specific amount</td>
<td>7.3</td>
<td>10.9</td>
</tr>
<tr>
<td>did not provide a specific amount or a range</td>
<td>0.8</td>
<td>1.6</td>
</tr>
</tbody>
</table>

†Cell size too small (n ≤ 5) to measure.

Survey Instruments

The Baseline Survey Instrument

The baseline survey was developed to answer the research questions listed in Exhibit 1-2 and was based on the one used for the MI SEED evaluation. Draft versions were distributed widely to SEED research partners for review and comment. RTI subjected the penultimate version of the baseline survey to cognitive testing, ascertaining respondent comprehension of the questions and reactions to questions in terms of sensitivity and sequencing.

As the draft instrument went through multiple rounds of review and revision, decisions had to be made about which items to keep and which items to remove because it was becoming quite long. We opted to omit items when there was no reason to believe there would be any differences between treatment and control group members, such as expectations for the

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newborn’s future. The final SEED OK baseline survey (see Appendix A) consists of questions that focus on the following topics:

- demographic characteristics and household composition;
- housing situation;
- health status of respondent and focal child;
- attitudes toward parenthood;
- expectations for college;
- respondent’s social support networks and mental health status;
- money management and savings;
- economic pressures;
- financial knowledge;
- employment;
- income, assets, and debts;
- savings for children; and
- methods for contacting the respondent in the future.

**Assets and Debts Mail Survey**

Information about household assets and debt is important in measuring the financial impact of SEED OK. Obtaining this information through a survey is difficult, and the task is even more challenging to conduct during a telephone survey for several reasons: the survey respondent may not be the most knowledgeable person about a household’s finances, respondents may need to review written records to get precise amounts of assets and debts, and survey respondents are notoriously reluctant to provide financial information over the telephone.\(^{31}\)

After consulting with research partners, colleagues, and the relevant literature, RTI developed a white paper that recommended a two-step method to collect information about assets and debts at baseline.\(^{32}\) The first step took place during the telephone interview, when respondents were asked whether their household had specific kinds of assets and debts. If they said “yes,” they were asked the amount in a given asset or owed on a given debt by indicating the asset/debt’s value in terms of a range.

The second step consisted of mailing a short form to the 2,704 individuals whom the respondent named as knowing most about the household’s finances. The form asked the

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respondent to indicate which specific kinds of assets and debts the household had and to provide dollar amounts for each. Respondents could complete the form and return it to RTI in a prepaid envelope or visit a secure website and complete the form online. A total of 1,093 forms were completed, 596 in hard copy and 497 on the web, representing a 40.4% cooperation rate.33

We had planned to use data from both the telephone and mail surveys but detected several potential problems. First, of those who completed the assets and debts mail survey, 63% had said in the phone survey that they were the person most knowledgeable about the household’s finances, but 74% who completed the mail survey were the phone survey respondent, so for most cases it is not clear whether the respondent to the mail survey was, in fact, more knowledgeable about the household’s finances than the person who answered the telephone survey questions. Second, there were discrepancies between responses to the mail and telephone surveys. For example, more than 13% of respondents to the mail and telephone survey did not agree on whether the household held a checking account. In light of the problems, we decided to rely solely on information gathered during the telephone interview for the impact analyses.

The Follow-up Survey Instrument

The SEED OK follow-up survey instrument was designed to answer the research questions listed in Exhibit 1–2. The follow-up survey looked to (1) measure initial impacts of SEED OK and (2) capture information that may eventually be important to understand the impacts of SEED OK as children age. Draft versions of the instrument were circulated through multiple iterations to the Ford Foundation, CSD, and the SEED Research Advisory Council for review and comment, and subjected to cognitive interviewing. The instrument consists of questions similar to those on the baseline survey, with some changes because the focal child was now 3 to 4 years old. Topics covered include34

- demographic characteristics and household composition;
- housing situation;
- health status of respondent and focal child;
- attitudes about parenting;
- expectations for the focal child’s future;
- respondent’s mental health status and future outlook;

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33 The cooperation rate represents the number of mail surveys completed out of all who completed the telephone survey. The response rate, which generally represents the number of completed surveys out of all eligible sample members, is 15%.

34 Two sets of questions on parenting quality were asked in the follow-up survey as a professional courtesy to researchers at CSD: (1) the Alabama Parenting Questionnaire-Preschool Revision (Clerkin, S. M. et al. (2007) and (2) psychometric properties of the APQ-PR. Journal of Clinical Child and Adolescent Psychology, 36(1), 19-28. RTI will not analyze these data for purposes of ascertaining the impact of SEED OK because the questions are outside the scope of inquiry that RTI is conducting.
• child’s schooling, environment, and development;
• money management and savings;
• economic pressures;
• employment;
• income, assets, and debts.

The follow-up survey is in Appendix B.

Psychosocial Factors

Several SEED OK research questions measure the impact of SEED OK on psychological and social outcomes (e.g., mental health, future orientation). Because the SEED OK focal children were about 4 years old at the time of the follow-up survey, measures for the focal child needed to be age appropriate. To determine how best to measure these outcomes in the follow-up survey, a small working group was formed with members from RTI, Ford, and the SEED Research Advisory Council. They focused on identifying questions to be asked in the survey that were (1) likely to tap measures of change due to SEED OK or (2) mediating factors that would eventually be used to understand long-term outcomes of SEED OK, and (3) appropriate considering the child’s age.

Several topics received extensive scrutiny. For example, the group considered asking about developmental delays that might affect parental attitudes toward the child’s future and education, but decided not to do so because most such conditions are unlikely to have been diagnosed at this stage in the child’s development. As another example, the group decided to add items from the widely used Ages and Stages questionnaire to measure the child’s social and emotional development. In addition to the Ages and Stages scales, the survey asked questions concerning the caregiver’s mental health (CES-D), future orientation, attitudes toward parenting, and optimism (LOT-R). This group also took into consideration the total length of the survey and in some instances recommended using selected items from scales to reduce respondent burden.

Collecting Asset and Debt Data

When planning the follow-up survey, we returned to the question of how to best capture information regarding assets and debts. In line with current best practices in the field of survey research, we designed the follow-up survey to ask respondents to provide a specific dollar amount for each type of asset and debt; if they did not know or declined to answer a given item, they were asked for ranges using a technique referred to as “unfolding.

We calibrated the brackets to match the range values in the baseline survey so that follow-up survey data can be collapsed into the same categories that were used at baseline, thus enabling consistent ranges across waves of data collection.

**Estimating Impacts**

Planners developed the SEED OK evaluation as an experiment with all baseline survey respondents being randomly assigned to either the treatment or control group. Because of random assignment, the treatment and control groups should be nearly identical and any differences detected can be attributed to the treatment. However, several factors could lead to differences between the two groups that are not related to the SEED OK treatment. In some cases, even with random assignment the treatment and control groups may have observable differences by chance alone. In addition, differential attrition or item non-response may introduce differences between groups. One way analysts might account for some of these differences is by controlling for the baseline characteristics of sample members in their analyses.

As described above, RTI’s analyses of the random assignment and non-response found no significant differences between the two groups. In addition, impact analyses that controlled for baseline characteristics showed only small differences from analyses that did not control for baseline characteristics, with no discernible pattern that might suggest nonrandom results—further confirming the internal validity of the evaluation.\(^{39}\) Put another way, the adjusted treatment effects, which are conditional on baseline characteristics, are highly similar to those that measure simple differences between treatment and control group members. Based on these analyses, we conclude it is not necessary to control for baseline characteristics in the analyses presented in the body of the report. (For interested readers, analyses of financial and psychosocial impacts controlling for baseline characteristics are presented in Appendix D.)

**Financial Impacts**

In the absence of differential randomization bias, attrition, and item non-response between treatment and control group families, simple comparisons of means and distributions of outcomes between the treatment and control groups identify causal impacts of the SEED intervention. Therefore, for financial outcomes, we estimate the intent-to-treat (ITT) impact of SEED OK using differences in mean outcomes at follow-up, implemented via simple ordinary least squares regression. In addition, for differences in outcomes at different

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39 Analysts might also control for baseline characteristics to generate improvements in the precision of analyses. We found that controlling for baseline characteristics did not improve precision enough to change the significance of outcomes.
percentiles in the outcome distribution, e.g., the distribution of financial assets, we estimate the ITT impact of SEED using simple ordinary quantile regression.\(^4\) All analyses are done on the sample of families who completed the follow-up interview and had non-missing values for the respective outcomes studied. We did not impute missing values because robustness checks based on simple imputations (described in Appendix D) suggested no substantive gain in statistical power from imputation.

**Psychosocial Impacts**

Psychosocial outcomes are a different type of variable from economic outcomes. Direct measurement of depression, optimism, future orientation, and parenting attitudes are not possible. These constructs reside in respondents’ minds or underlie their behaviors in some way, but researchers do not have direct access to them in the same way we do to something tangible, such as the amount of money in a savings account. This inaccessibility makes them “latent” variables. To address this issue, social scientists use variables that can be measured and use statistical modeling to develop estimates for latent variables. For SEED OK we use structural equation modeling (SEM) to analyze psychosocial outcomes. SEM models have two parts, a structural and a measurement model part, which are described in Appendix E.

These statistical modeling methods are not without their drawbacks. One difficulty with analyzing a latent variable is that the result does not reference any known scale or score. Analysts can run statistical tests to determine whether an intervention had an effect, but because there is no scale interpretation, the effect size is less clear than for a previously validated scale. To help interpret the SEM results, we supplement them with tests of individual items. For example, we measure respondents’ optimism versus pessimism (a latent variable) in a SEM model and also explore in more detail their numerical scores on a scale that measures specific aspects of optimism.

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\(^4\) These methods are detailed in Appendix D, where we also present regression-adjusted treatment effect ITT estimates, controlling for baseline characteristics. These results are very similar to the ones reported in the following chapters.
3. THE STRUCTURE OF SEED FOR OKLAHOMA KIDS

This chapter describes the structure of the SEED for Oklahoma Kids initiative. It focuses on two areas: the financial structure and the intervention treatment that families received. Both areas provide relevant background for the impact analyses that follow in subsequent chapters. The major findings are as follows:

- State-owned accounts (which are described below) were opened for 1,357 of the 1,358 (99.9%) treatment group families. One treatment group family had a state-owned account established, but ultimately declined to accept the $1,000 deposit for religious reasons. Otherwise, ownership would have been 100% for the treatment group, consistent with the principle of a universal model of child development accounts. That accounts were opened for all treatment group families is a major SEED OK result.

Several program features appear to influence savings behavior among treatment group members:

- A limited-time offer of a $100 deposit to open a participant-owned account had a pronounced impact on the timing of opening an account.
- Substantially more families from the second wave of the baseline survey opened participant-owned accounts than those from the first wave. Members from the second wave seem to have been influenced by a campaign that the Oklahoma Treasurer’s Office conducted to promote SEED OK.
- Soon after the state-owned accounts were opened—but before participants opened their own accounts—there was a sizable surge in the number of families who consented to provide information to determine their eligibility for matching funds.
- Substantially more families gave consent to determine whether they were eligible for matching funds than ultimately opened a participant-owned account.

Program Outreach

Unlike previous SEED initiatives, which required active parental agreement for children to receive a SEED account, SEED OK was designed to determine the impact of universal child development accounts that would be automatically opened at birth. Also unlike previous SEED initiatives, which entailed in-person, sometimes intensive interactions between the program and the potential participant, SEED OK was designed to test a less hands-on strategy, similar to one that would be used in a scaled-up version of child development accounts automatically opened at birth.

After the baseline survey was completed and respondents were randomly assigned to treatment and control groups, SEED OK mailed a packet of materials to treatment group families describing the program and encouraging participants to open their own Oklahoma College Savings Plan account. The packet consisted of:
• A letter explaining SEED for Oklahoma Kids;
• A brochure of frequently asked questions;41
• A form to complete to determine if the family would be eligible for matching funds;42
• The terms of the savings match;43 and
• The Oklahoma College Savings Plan forms and brochure.44

At least 66 contacts with treatment group families were attempted throughout the demonstration period, including the following:

• Several mailings encouraging participants to open their own Oklahoma College Savings Plan account, return the match eligibility form, deposit funds into their accounts, and teach their child about savings.
• Quarterly statements for the state-owned account.
• Telephone calls and emails to encourage them to open their own account and return the match eligibility form.45
• Mailings with a child’s t-shirt, books, a calendar, and educational music CDs.

Financial Structure

SEED OK is first and foremost an initiative involving child development accounts earmarked for the child’s education. The structure of the SEED OK initiative is presented in Exhibit 3-1. To summarize:

• Treatment group families received an initial SEED deposit of $1,000, could open a participant-owned account with SEED contributing $100 to do so, and (depending on household income) were eligible for matching contributions.
• Control group families did not receive the initial SEED deposit of $1,000, were not offered a $100 deposit to open a participant-owned account, and were not eligible for matching contributions. They could have opened an Oklahoma College Savings Plan account because these plans are available to the general public.

The sections below discuss the saving platform, types of plans for study participants, and opportunities for treatment group members to receive matching funds.

The Oklahoma College Savings Plan

The saving vehicle for SEED OK is the Oklahoma College Savings Plan (OCSP), which is the state-sponsored 529 plan,46 currently managed through TIAA-CREF Tuition Financing, Inc.47

45 This evaluation does not measure the impact of these contacts.
46 A 529 plan is a tax-deferred form of saving for education governed by Section 529 of the Internal Revenue Code. Although 529 plans are based in federal law, states sponsor them, choose the financial institutions to
Under federal law, a 529 plan has two key parties: the beneficiary and the owner of the account. The beneficiary is a child for whom the funds are to be used for qualified educational expenses. The owner is typically an adult (such as a parent, grandparent, other relative, or friend) who makes a contribution to the plan. Control of the plan rests with the owner—which can also be a nonprofit organization or government agency—and can change the beneficiary or withdraw funds at any time.

**Exhibit 3-1. The Structure of SEED OK Oklahoma College Savings Plan Accounts**

Contributions to the Oklahoma College Savings Plan can be made by check, through an automatic contribution plan, by payroll deduction, or through electronic funds transfer. The minimum amount to open an account is $100. Subsequent contributions must be at least $15 per pay period for those who use payroll deduction or $25 for those who use other payment methods. Contributions made by Oklahoma residents are deductible when

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administer the plans, and design them, including state income tax treatment for state residents, the menu of investment alternatives, fee structures, and vendors.

Oklahoma has one other plan available to the public, the Oklahoma Dream 529 Plan. As of December 31, 2011, only one child in the control group and three in the treatment group were designated as Dream Plan beneficiaries. Participation in this plan is not included in the SEED OK evaluation.
determining their Oklahoma state taxable income. There is no annual limit on contributions; the 529 account is subject to a maximum account balance of $300,000.

Earnings on all deposits are tax-free at both the federal and state level as long as withdrawals are used for qualified educational purposes. In Oklahoma, these include tuition, books, supplies, required fees and equipment, and some room and board costs at any eligible in-state or out-of-state public or private college, university, graduate, or trade school.

**State- and Participant-Owned 529 Plans**

For treatment group families, the SEED OK program consists of two distinct 529 plans: a state-owned account and the option to open a participant-owned account (Exhibit 3-1).

As a design feature of the study, all treatment group families were to receive an unconditional $1,000 deposit into the Oklahoma College Savings Plan, naming the newborn child as beneficiary. This plan, known as the *state-owned account*, is a custodial account. The state is the owner and the child is the beneficiary; funds can be withdrawn only for approved educational purposes. Funds in the state-owned account are invested in the OCSP’s Balanced Option, reflecting a moderate level of investment risk.

The state-owned accounts were opened in two waves, parallel to the fielding of the baseline survey. The first wave occurred on December 27, 2007, when accounts were opened for most (87%) of the first birth group (i.e., those born from April through June, 2007). The second wave occurred on May 12, 2008, when accounts were opened for the remaining 13% of the first birth group and the entire second birth group (i.e., those born from August through October, 2007). Overall, 99.94% of the treatment group families had a state-owned account opened for their child. One treatment group family had a state-owned account established, but the family declined the $1,000 deposit for religious reasons. Otherwise, all treatment group newborns would have had 529 plans: the universal model. That the accounts portion of SEED OK was successfully implemented for all treatment group families is a major, important result of the SEED initiative.

In addition to the state-owned account, parents of focal children could open a 529 account to facilitate their own saving, known as the *participant-owned account*. As shown in

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48 The deductible amount is capped at $10,000 for single individuals and $20,000 for married couples. The OCSP offers additional estate and gift tax benefits.

49 The OCSP offers nine investment options. Three are age-based, meaning that the mix of assets shifts as the child ages, three are equity options (an aggressive level of investment risk), and three offer more conservative levels of risk. TIAA-CREF charges annual fees that range from 56 to 95 basis points (except for one fund, the Guaranteed Option, where fees are reflected in the rate of return).

50 A third type of account is relevant for this study, which we refer to as the "other-owned account." This is a private account that names the focal child as the beneficiary, but is owned by someone other than the parent, such as a friend or relative. Deposits to these accounts were not eligible for the SEED matching contributions discussed below.
Exhibit 3-1, the parent is the owner and the child is the beneficiary. Funds in the participant-owned account are under the control of and invested in the parent’s chosen investment option(s). As an inducement to participant-owned accounts, SEED OK offered to make the $100 minimum opening deposit for all treatment group families. For those in the first wave of account opening, the $100 offer was to expire on April 15, 2008; the $100 offer was given to the second wave with an expiration date of April 15, 2009, and also extended to those in the first wave who had not yet accepted it.

Exhibit 3-2 shows the timing of the opening for participant-owned accounts in the treatment group. The horizontal axis in the figure marks calendar time in days since the beginning of the experiment, with markers once per quarter when statements were mailed to 529 account holders. The solid line represents the cumulative percentage of participant-owned accounts opened for treatment group families from the first wave; the long-dashed line represents the same percentage for the second wave.

**Exhibit 3-2. Timing of Participant-Owned Account Opening**

There are three notable features of the exhibit. First, about 15% of treatment group families ever opened a participant-owned account. Second, most account opening occurred shortly after the state-owned account was established (i.e., within 3 months). The bump-up among the second wave in the summer of 2008 is interesting because it broadly coincides with a campaign by the Oklahoma Treasurer’s Office to promote SEED OK, thus suggesting the
benefit of outreach to encourage savings. Third, only 12 participant-owned accounts were opened after April 15, 2009, suggesting that the vast majority of SEED OK treatment group members saw no benefit to opening their own 529 account after the $100 offer had expired.

Matching Funds

SEED OK has another important feature: matching funds. During the first 3 years of the experiment, annual deposits of up to $250 into a treatment group member’s participant-owned account were eligible for a match. Eligibility for the match depended on the household’s adjusted gross income (AGI) reported on the Oklahoma state income tax return 2 years prior.\(^{51}\) Regardless of marital status or number of earners in the household, the match rate established by the SEED program was

- dollar for dollar if AGI was less than $29,000,
- fifty cents per dollar if AGI was between $29,000 and $43,500.

In other words, for every dollar low-income families deposited into the participant-owned account, SEED OK would deposit one dollar into the state-owned account; for every dollar moderate-income families deposited into the participant-owned account, SEED OK would deposit fifty cents. Households with AGI greater than or equal to $43,500 were not eligible for the match. The $29,000 and $43,500 cut-off amounts correspond to 100% and 150% of the estimated median AGI in Oklahoma in 2006.\(^{52}\)

Income had to be verified before matching funds were disbursed. To do so, the parent had to file a Match Eligibility Form, which gave consent for the Oklahoma Tax Commission and the Oklahoma Department of Human Services to release information to the Oklahoma State Treasurer’s Office to verify income and determine match eligibility. Consent had to be given only once, but because incomes change over time, eligibility had to be verified each year. Those who were not required to file an Oklahoma tax return and were not receiving state benefits could file a Self-Certification Form, which is an affidavit declaring their annual income.

For those who consented and qualified, matching contributions were placed into the state-owned account in the following quarter and invested in the Balanced Option. The initial SEED OK deposit and all SEED OK matching funds were placed into the state-owned account and are not under parental control.

\(^{51}\) Households that did not file a state tax return were eligible for matching funds if they received Food Stamps (SNAP), Medicaid (SoonerCare), or Temporary Assistance for Needy Families (TANF) from Oklahoma 2 years prior or if their income level meant they were not required to file both federal and Oklahoma tax returns.

Exhibit 3-3 shows the timing of the filing of match consent forms in the treatment group. For both waves, a sizeable surge in match consent occurred shortly after the opening of the state-owned accounts, yet before the first bump up in participant-owned account opening (shown in Exhibit 3-2). Substantially more families gave consent to determine their eligibility than ultimately opened a participant-owned account.

**Exhibit 3-3  Timing of Consent to Verify Income for the Match**

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**Financial Incentives to Save**

Chapter 1 outlines the links between SEED structure and outcomes based on asset-building theory. This section complements that discussion with a description of the purely financial incentives to save through SEED OK. Exhibit 3-4 illustrates these differences for three scenarios, with columns organized by family AGI (low, middle, and high).\(^{53}\)

- The first scenario shows that a treatment group parent who did not accept the offer of the $100 deposit to open a participant-owned account and made no deposits would have had a total of $1,000 in the state-owned and controlled account (invested in the Balanced Option). A similar control group family would have had nothing. Therefore, the difference between the treatment and control groups in total (across both state- and participant-owned accounts) is $1,000, due solely to the initial SEED deposit.
- The second scenario shows the case for a treatment group parent who accepts the offer of the $100 deposit to open a participant-owned account, but puts in no...
additional own funds. Here, $1,100 is accumulated for the focal child (the $1,000 initial SEED deposit + the $100 deposit). A similar control group family would have had nothing. Therefore, the total difference between the treatment and control group member is $1,100, again due entirely to SEED money.

- In the third scenario, a treatment group parent takes up the SEED OK offer of the $100 deposit and contributes $250 per year, exactly the maximum amount available for matching funds. Low-income families would earn a 1:1 match, accumulating $2,600 for the focal child (the $1,000 initial SEED deposit + the $100 deposit + the parent’s deposit + matching contributions). A similar control group family would have $750, resulting in a difference between the two families of $1,850. Middle-income families would have a difference of $1,475, and high-income families (with no match) would have a difference of $1,100.

### Exhibit 3-4. Illustration of SEED OK Saving Incentives

<table>
<thead>
<tr>
<th>Amount of Contribution and Source of Funds</th>
<th>Household Income Groups</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&lt;$29,000</td>
<td>$29,000–$43,499</td>
<td>≥$43,500</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Treatment</td>
<td>Control</td>
<td>Treatment</td>
<td>Control</td>
</tr>
<tr>
<td>parent does not take up state offer of $100 and does not make own contribution</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SEED OK initial deposit into state-owned account</td>
<td>$1,000</td>
<td>--</td>
<td>$1,000</td>
<td>--</td>
</tr>
<tr>
<td>SEED OK opening deposit into participant-owned account</td>
<td>0</td>
<td>--</td>
<td>0</td>
<td>--</td>
</tr>
<tr>
<td>parent’s deposit</td>
<td>0</td>
<td>--</td>
<td>0</td>
<td>--</td>
</tr>
<tr>
<td>SEED OK match on parent’s deposit</td>
<td>0</td>
<td>--</td>
<td>0</td>
<td>--</td>
</tr>
<tr>
<td>total amount accumulated across all accounts</td>
<td>$1,000</td>
<td>--</td>
<td>$1,000</td>
<td>--</td>
</tr>
<tr>
<td>percent of total from own contributions</td>
<td>0%</td>
<td>--</td>
<td>0%</td>
<td>--</td>
</tr>
<tr>
<td>parent takes up state offer of $100 and does not make own contribution</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SEED OK initial deposit into state-owned account</td>
<td>$1,000</td>
<td>--</td>
<td>$1,000</td>
<td>--</td>
</tr>
<tr>
<td>SEED OK opening deposit into participant-owned account</td>
<td>$100</td>
<td>--</td>
<td>$100</td>
<td>--</td>
</tr>
<tr>
<td>parent’s deposit</td>
<td>0</td>
<td>--</td>
<td>0</td>
<td>--</td>
</tr>
<tr>
<td>SEED OK match on parent’s deposit</td>
<td>0</td>
<td>--</td>
<td>0</td>
<td>--</td>
</tr>
<tr>
<td>total amount accumulated across all accounts</td>
<td>$1,100</td>
<td>--</td>
<td>$1,100</td>
<td>--</td>
</tr>
<tr>
<td>percent of total from own contributions</td>
<td>0%</td>
<td>--</td>
<td>0%</td>
<td>--</td>
</tr>
<tr>
<td>parent takes up state offer of $100 and makes own contribution of $250/year for 3 years</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SEED OK initial deposit into state-owned account</td>
<td>$1,000</td>
<td>--</td>
<td>$1,000</td>
<td>--</td>
</tr>
<tr>
<td>SEED OK opening deposit into participant-owned account</td>
<td>$100</td>
<td>--</td>
<td>$100</td>
<td>--</td>
</tr>
<tr>
<td>parent’s deposit</td>
<td>$750</td>
<td>100%</td>
<td>$750</td>
<td>100%</td>
</tr>
<tr>
<td>seed ok match on parent’s deposit</td>
<td>$750</td>
<td>--</td>
<td>$375</td>
<td>--</td>
</tr>
<tr>
<td>total accumulated across all accounts</td>
<td>$2,600</td>
<td>100%</td>
<td>$2,225</td>
<td>100%</td>
</tr>
<tr>
<td>percent of total from own contributions</td>
<td>29%</td>
<td>100%</td>
<td>34%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Note: Bold indicates balances held in the custodial state-owned account.
Looking at the last row in each of these panels, one observation is that over the first 3 years of the experiment, the vast majority of the total funds accumulated are subsidies from SEED OK. For those contributing up to the match cap of $250 each year, 29 to 34% of the total accumulation is due to their own contributions.
4. PATTERNS OF ACCOUNT OWNERSHIP

This chapter presents estimates of the impact of SEED OK on active participation in the Oklahoma College Savings Plan as measured by account opening. The analysis draws on account data from TIAA-CREF, sociodemographic information from the baseline survey, and self-reported data from the follow-up survey. This is an important aspect of the impact study because SEED OK encouraged families to save for their children’s education by opening a participant-owned account. Major findings are as follows:

- SEED OK raised the proportion of families who have their own 529 plans by 15 percentage points.
- In the absence of SEED, an Oklahoma College Savings Plan would be rare for young children: less than 1% of parents in the control group opened such a plan.
- Sample members who have their own 529 plan are overwhelmingly concentrated among higher socioeconomic families.
- Among treatment group members, 16% opened their own account. Of those, half made contributions to their own account.
- Survey respondents had varied perceptions about what constitutes “account ownership.” Some cited the state-owned account as if it were a participant-owned account and vice versa.
- When treatment group members without a participant-owned account were asked why they had not opened one, the primary reasons were financial difficulties and lack of understanding of the SEED program rules.
- When those with participant-owned accounts were asked why they had opened one, the primary reason was to save for the focal child’s college education or future. A small percentage cited the structure of the SEED incentives.

Ownership by Type of Account

Exhibit 4-1 presents the incidence of 529 accounts, as measured by TIAA-CREF administrative data at the end of the experiment (December 31, 2011). It compares results for focal children in treatment and control group families and shows that 16% of treatment group families had opened a participant-owned account by the end of the experiment. In comparison, 0.8% of control group families had opened such an account. This latter figure represents the counterfactual, that is, the percentage of accounts that would have been opened and owned if SEED OK had not been implemented. Therefore, the difference between the rates for treatment and control group children (shown in the third row) indicates that the net impact of SEED OK was to raise the incidence of participant-owned 529 plans by 15.1 percentage points.

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54 Data in Exhibit 4-1 were calculated taking into account the stratified random sampling design (described in Chapter 2) and the final follow-up weights with adjustments for post-stratification and attrition from baseline. The results are quantitatively and qualitatively similar to analyses using unweighted means, i.e., not taking into account the complex sampling design.
Exhibit 4-1. 529 Plan Ownership for the Focal Child, by Group and Account Type (in percents)

<table>
<thead>
<tr>
<th>Sample</th>
<th>Participant-owned Account</th>
<th>Other-owned Account</th>
<th>Any Account (state, participant, or other)</th>
</tr>
</thead>
<tbody>
<tr>
<td>treatment group</td>
<td>15.9</td>
<td>2.1</td>
<td>99.9</td>
</tr>
<tr>
<td>control group</td>
<td>0.8</td>
<td>1.7</td>
<td>2.4</td>
</tr>
<tr>
<td>difference:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>row 1 – row 2</td>
<td>15.1</td>
<td>0.4</td>
<td>97.5</td>
</tr>
<tr>
<td></td>
<td>(1.1)</td>
<td>(0.6)</td>
<td>(0.5)</td>
</tr>
</tbody>
</table>

Note: Standard errors in parentheses.

Exhibit 4-1 also shows similar calculations for 529 accounts owned by someone other than the parent, naming the focal child as the beneficiary. A total of 2.1% of focal children in treatment group families had an account owned by someone other than a parent, compared to 1.7% for focal children from control group families, for a difference of 0.4 percentage points. The last column shows the percentage with any 529 account. The total of 99.9% of treatment group members with any account is one of SEED OK’s most notable achievements, demonstrating that child development accounts can be developed and implemented for those who agreed to participate in this experiment.

Account Ownership by Sociodemographic Characteristics

Exhibit 4-2 shows sociodemographic characteristics at baseline for treatment group members who have their own or other-owned 529 accounts for the focal child, based on data from TIAA-CREF records. Here, the results are very clear and quite compelling. Across all metrics, there are strong gradients in account ownership by mother’s age, education, race, ethnicity, marital status, and income:

- Essentially no accounts were opened by young parents, but at least 60% of those over age 30 opened an account.
- Essentially no accounts were opened by parents who had not completed high school, but about half of all parents with more than a college degree opened an account.
- Non-Hispanic whites had significantly higher account opening than other racial/ethnic groups.
- Married parents were significantly more likely to open accounts than those who were not married.

Overall, treatment group families with higher socioeconomic status were overwhelmingly more likely to actively participate in SEED OK through opening their own accounts.
### Exhibit 4-2. Incidence of 529 Accounts for the Focal Child in Treatment Group Families, by Selected Baseline Characteristics (in percents)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>All Treatment Group Families</th>
<th>Have 529 Account</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n = 1,358</td>
<td>Participant-owned</td>
</tr>
<tr>
<td>all families</td>
<td></td>
<td>15.9</td>
</tr>
<tr>
<td>age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>≤19</td>
<td>11.7</td>
<td>3.4</td>
</tr>
<tr>
<td>20–24</td>
<td>33.7</td>
<td>8.8</td>
</tr>
<tr>
<td>25–29</td>
<td>27.0</td>
<td>16.7</td>
</tr>
<tr>
<td>30–34</td>
<td>20.5</td>
<td>25.1</td>
</tr>
<tr>
<td>≥35</td>
<td>7.2</td>
<td>39.9</td>
</tr>
<tr>
<td>education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;high school</td>
<td>23.4</td>
<td>3.8</td>
</tr>
<tr>
<td>high school degree</td>
<td>30.5</td>
<td>8.0</td>
</tr>
<tr>
<td>some college</td>
<td>26.5</td>
<td>6.2</td>
</tr>
<tr>
<td>college degree</td>
<td>12.8</td>
<td>35.7</td>
</tr>
<tr>
<td>&gt;college</td>
<td>6.8</td>
<td>54.2</td>
</tr>
<tr>
<td>race</td>
<td></td>
<td></td>
</tr>
<tr>
<td>African American</td>
<td>8.9</td>
<td>10.4</td>
</tr>
<tr>
<td>American Indian</td>
<td>11.4</td>
<td>8.3</td>
</tr>
<tr>
<td>Hispanic</td>
<td>13.0</td>
<td>5.3</td>
</tr>
<tr>
<td>other (white)</td>
<td>66.7</td>
<td>20.0</td>
</tr>
<tr>
<td>marital status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>not married</td>
<td>39.0</td>
<td>6.9</td>
</tr>
<tr>
<td>married</td>
<td>61.0</td>
<td>21.6</td>
</tr>
<tr>
<td>number of children</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>29.8</td>
<td>16.4</td>
</tr>
<tr>
<td>2</td>
<td>37.5</td>
<td>16.8</td>
</tr>
<tr>
<td>3 or more</td>
<td>32.7</td>
<td>14.4</td>
</tr>
<tr>
<td>household income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;$29,000</td>
<td>34.2</td>
<td>7.5</td>
</tr>
<tr>
<td>$29,000–$44,999</td>
<td>13.5</td>
<td>14.1</td>
</tr>
<tr>
<td>≥$45,000</td>
<td>49.3</td>
<td>21.8</td>
</tr>
</tbody>
</table>

This pattern continues for treatment group members who opened their own accounts and made contributions into those accounts. In Exhibit 4-3, the first column shows the distribution of participant-owned account holders by socioeconomic characteristic and the second column shows the fraction of participant-owned account holders who made deposits into the account. Half of all such account holders contributed to these accounts from their own resources; their average contribution was $1,449. The data show strong gradients in
contributions by mother’s age, education, marital status, and income. This is true for both the proportion making their own contributions and the amount of those contributions. Overall, treatment group members with higher socioeconomic status were substantially more likely to make their own contributions and contribute more than other families.

Exhibit 4-3. Characteristics and Contributions of Treatment Group Members with Participant-owned 529 Accounts

<table>
<thead>
<tr>
<th>Sample</th>
<th>Percent of Families with Participant-owned Accounts</th>
<th>Percent of Families with Participant-owned Accounts Making Own Contributions</th>
<th>Mean Amount of Contribution from Families Making Own Contributions</th>
</tr>
</thead>
<tbody>
<tr>
<td>all families</td>
<td>n = 216</td>
<td>50.2</td>
<td>$1,449</td>
</tr>
<tr>
<td>age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>≤19</td>
<td>2.5</td>
<td>0.0</td>
<td>$0</td>
</tr>
<tr>
<td>20–24</td>
<td>18.6</td>
<td>42.0</td>
<td>$429</td>
</tr>
<tr>
<td>25–29</td>
<td>28.4</td>
<td>52.0</td>
<td>$991</td>
</tr>
<tr>
<td>30–34</td>
<td>32.3</td>
<td>53.3</td>
<td>$1,519</td>
</tr>
<tr>
<td>≥35</td>
<td>18.2</td>
<td>57.2</td>
<td>$2,751</td>
</tr>
<tr>
<td>education</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;high school</td>
<td>5.5</td>
<td>17.9</td>
<td>$26</td>
</tr>
<tr>
<td>high school degree</td>
<td>15.4</td>
<td>43.4</td>
<td>$528</td>
</tr>
<tr>
<td>some college</td>
<td>27.0</td>
<td>35.8</td>
<td>$436</td>
</tr>
<tr>
<td>college degree</td>
<td>28.7</td>
<td>55.1</td>
<td>$1,657</td>
</tr>
<tr>
<td>&gt;college</td>
<td>23.3</td>
<td>73.0</td>
<td>$2,274</td>
</tr>
<tr>
<td>race</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>African American</td>
<td>5.8</td>
<td>37.1</td>
<td>$362</td>
</tr>
<tr>
<td>American Indian</td>
<td>6.0</td>
<td>40.5</td>
<td>$1,845</td>
</tr>
<tr>
<td>Hispanic</td>
<td>4.3</td>
<td>41.8</td>
<td>$526</td>
</tr>
<tr>
<td>other (white)</td>
<td>83.9</td>
<td>52.2</td>
<td>$1,519</td>
</tr>
<tr>
<td>marital status</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>not married</td>
<td>16.9</td>
<td>40.1</td>
<td>$1,022</td>
</tr>
<tr>
<td>married</td>
<td>83.1</td>
<td>52.3</td>
<td>$1,516</td>
</tr>
<tr>
<td>number of children</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>30.8</td>
<td>63.4</td>
<td>$1,146</td>
</tr>
<tr>
<td>2</td>
<td>39.6</td>
<td>48.1</td>
<td>$1,747</td>
</tr>
<tr>
<td>3 or more</td>
<td>29.7</td>
<td>39.4</td>
<td>$1,470</td>
</tr>
<tr>
<td>household income</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;$29,000</td>
<td>16.1</td>
<td>34.9</td>
<td>$413</td>
</tr>
<tr>
<td>$29,000–$44,999</td>
<td>12.0</td>
<td>50.8</td>
<td>$478</td>
</tr>
<tr>
<td>≥$45,000</td>
<td>72.0</td>
<td>53.5</td>
<td>$1,753</td>
</tr>
</tbody>
</table>

Data about contributions by race/ethnicity in Exhibit 4-3 warrant further commentary because the average amount of contributions—while a meaningful indicator—can be strongly affected by outliers. American Indians had the highest amount of average contributions, followed by whites, and then a sharp drop for Hispanics and African Americans. The
averages result from wide variances in savings deposits. Ten American Indian families made contributions into their own accounts: one family deposited $15,500, two families deposited from $1,000 to $1,800, and seven families deposited less than $1,000. Seven African American families and six Hispanic families made their own deposits; the range was much narrower (from $175 to $800 and from $100 to $1,900, respectively).

Reasons Treatment Group Members Open or Do Not Open Their Own Accounts

Treatment group respondents were asked an open-ended question about why they had or had not opened their own 529 account, and their verbatim responses were coded into broad categories.\textsuperscript{55} The top part of Exhibit 4-4 provides the answers from the 168 treatment group respondents who had opened their own SEED account for the focal child.\textsuperscript{56} Almost half (46\%) said they opened an account because they wanted to save for their child’s college or future. Another 19\% indicated the structure of SEED OK incentives as a reason, citing a specific program feature such as the tax preference, matching, or the $100 limited-time initial deposit. Almost 28\% of families cited SEED’s program outreach as the reason, indicating that they opened their own account because it was explicitly offered to them through SEED OK.

Answers from the 652 respondents who said they had not opened their own 529 account for the focal child, shown in the bottom part of Exhibit 4-5, were more varied. The most common reason was lack of affordability or financial difficulty (41\%). Nearly 5\% indicated that they clearly understood the program rules and gave specific reasons as to why SEED OK or a 529 account was not a desirable way to save for their family. For example, some said their child’s state-owned account had lost money, so they chose not to open an additional account; others said they did not like that only one of their children could get a SEED OK account. In contrast, responses from 14\% show they did not open their own account because they misunderstood the program, did not understand the program rules or incentives, or found the paperwork confusing. About 1 in 10 families cited procrastination, about 2\% mentioned a particular life event such as a major illness or move, and about 10\% said they could not think of a reason or did not recall why they did not open an account.

\textsuperscript{55} The open-ended responses were coded by three coders who initially worked independently, collaborated to reconcile differences in recommended classifications, then recoded until inter-coder reliability was achieved (Fleiss's Kappa ≥ .80).

\textsuperscript{56} This question was asked of all respondents who reported during the survey opening their own 529 account. Some respondents indicated they had opened their own account but actually had not, according to administrative data. This analysis only presents answers from respondents who reported in the survey that they had opened an account and administrative data confirmed this.
Exhibit 4-4. Reasons for Opening and Not Opening Accounts among Treatment Group Families

<table>
<thead>
<tr>
<th>Reason for Opening/Not Opening</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>has own account: reason for opening</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>want to plan for child’s college or future</td>
<td>78</td>
<td>46.4</td>
</tr>
<tr>
<td>SEED program outreach</td>
<td>47</td>
<td>28.0</td>
</tr>
<tr>
<td>SEED OK incentives</td>
<td>32</td>
<td>19.1</td>
</tr>
<tr>
<td>all other reasons</td>
<td>11</td>
<td>6.6</td>
</tr>
<tr>
<td><strong>total</strong></td>
<td>168</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>does not have account: reason for not opening</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>could not afford</td>
<td>265</td>
<td>40.6</td>
</tr>
<tr>
<td>did not understand program rules</td>
<td>91</td>
<td>14.0</td>
</tr>
<tr>
<td>no reason or can’t remember</td>
<td>68</td>
<td>10.4</td>
</tr>
<tr>
<td>procrastination</td>
<td>62</td>
<td>9.5</td>
</tr>
<tr>
<td>already had saving arrangement</td>
<td>50</td>
<td>7.7</td>
</tr>
<tr>
<td>inherent limitations of the SEED program or 529 plans</td>
<td>30</td>
<td>4.6</td>
</tr>
<tr>
<td>life issues</td>
<td>14</td>
<td>2.2</td>
</tr>
<tr>
<td>all other reasons</td>
<td>72</td>
<td>11.0</td>
</tr>
<tr>
<td><strong>total</strong></td>
<td>652</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Relationship between Administrative and Self-Reported Data

SEED for Oklahoma Kids is testing a component of asset development theory and provides an opportunity to briefly explore one potentially interesting aspect: we can determine how closely administrative data regarding account ownership align with self-reported data from survey respondents. The question is important because families cannot access the account the state owns (with the $1,000 deposit and matching contributions), but they can access participant-owned accounts (with the $100 deposit and their own contributions)—thus perhaps limiting the utility of the state-owned account as a household asset that can be tapped as collateral, a reserve fund for emergencies, savings that enhance the household’s general financial status, or other functions assets perform. The follow-up survey asked

*Do you have funds specifically set aside for {focal child’s} education in a college savings plan or 529 plan in the state of Oklahoma called an Oklahoma College Savings Plan?*

Nearly one in five (18.4%) respondents from the treatment group and 5.4% from the control group said they had a participant-owned account for the focal child by the end of the
experiment. These figures show a substantial discrepancy from the TIAA-CREF administrative data, which are 15.9% and 0.8%, respectively. We investigated this finding further because the perception of having (or not having) assets is likely to be associated with the impact of having (or not having) them. Among treatment group members, 103 families said they had no participant-owned OCSP account for the focal child even though they did, and 133 families said they had a participant-owned OCSP account but in fact did not. Thus, treatment group members have differing perceptions about having versus not having various types of assets. The survey has a second measure of account opening specifically linked to SEED OK beginning with the following:

Now I’d like to ask you some specific questions about the Oklahoma College Savings Plan and a program called SEED for Oklahoma Kids. I understand you may have had the opportunity to open your own Oklahoma College Savings Plan for {focal child}. Did you?

Twenty-five respondents said they had not opened participant-owned accounts for the focal child when in fact they had; 277 said they had opened an account under SEED OK but in fact had not.

A clear disconnect appears in respondent perception of having OCSP funds for the focal child and the actual situation. We cannot determine whether the confusion is a result of the wording of the survey question or because SEED OK has some different program features than what might be found in a universal system of children’s savings accounts. The important point is that if SEED OK does not produce the kinds of positive, measurable changes programs planners had hoped it would, analysts need to consider the possibility that study members have varying perceptions of the SEED account and may not perceive it as an asset.
5. PATTERNS OF ACCOUNT BALANCES

This chapter presents estimates of the impact of SEED OK as measured by account balances at the end of the demonstration. The analysis in this chapter uses TIAA-CREF administrative data on Oklahoma College Saving Plan (OCSP) accounts, merged with socioeconomic information from the baseline survey and data on non-529 account savings that respondents provided in the follow-up survey. The major findings are

- The total amount of funds in all OCSP 529 accounts for a focal child in the treatment group averaged $1,255 at the end of the demonstration period.
- Most of this accumulation was a result of the $1,000 initial deposit.
- The SEED treatment effects on balances in participant-owned accounts were unequally distributed across families: large balances in participant-owned accounts in SEED OK were overwhelmingly concentrated in higher socioeconomic families.
- The mean treatment effect on balances in participant-owned accounts was $120. The mean treatment effect is 0 for the bottom 84% of families (ranked by the amount of saving), a small impact for the next 10%, and progressively larger impacts for the top 6% of savers.

Balances by Type of Account

By the end of the SEED OK experiment, treatment group members had an average balance of $1,255 in any 529 account; control group members had an average balance of $149. Exhibit 5-1 shows the impact of SEED on balances in participant-owned accounts at the end of the experiment. The exhibit shows that the average balance in participant-owned accounts across all treatment group families was $152 (row 1); in comparison, the average balance for control group families was $25 (row 2). The control group figure represents the counterfactual, i.e., accumulations that would have occurred in the absence of SEED OK. Therefore, the difference between rows 1 and 2 (row 3) is the net impact. For example, the first column shows that SEED OK raised balances in participant-owned 529 plans by an average of $127. With a standard error of $34, this is a statistically significant treatment effect at the 5% level of significance.

Exhibit 5-2 moves beyond differences in means and shows quantile treatment effects (QTEs). The QTEs represent estimated impacts of the SEED treatment at various points in the saving distribution. This analysis is important for two reasons. First, mean treatment effect estimates can be heavily influenced by outliers. So, for example, quantile estimates can shed light on whether the mean SEED impact of $127 shown in Exhibit 5-1 is relatively evenly spread across the treatment group or concentrated among only a few really big savers. Second and relatedly, mean treatment effects can mask important heterogeneity in responses to the intervention; because they are just weighted averages of effects at all
points of the saving distribution, it is possible that SEED OK could have had important impacts in some regions of the savings distribution, even if the mean impacts are small.

**Exhibit 5-1.** Plan Balances for the Focal Child in All Accounts at the End of the Experiment, by Treatment Status and Type of Account (standard errors in parentheses)

<table>
<thead>
<tr>
<th>Sample</th>
<th>Administrative Data (n = 2,704)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Participant-owned Account</td>
<td>Other-owned Account</td>
<td>Any Account (state-, participant-, or other-owned)</td>
</tr>
<tr>
<td>treatment group families</td>
<td>$152</td>
<td>$67</td>
<td>$1,255</td>
</tr>
<tr>
<td>control group families</td>
<td>$25</td>
<td>$124</td>
<td>$149</td>
</tr>
<tr>
<td>net impact (row 1 – row 2)</td>
<td>$127 (34)</td>
<td>-$58 (45)</td>
<td>$1,106 (57)</td>
</tr>
</tbody>
</table>

**Exhibit 5-2.** Quantile Treatment Effects on Participant-owned 529 Assets for the Focal Child Based on Administrative Data

The solid blue line in Exhibit 5-2 shows the estimated SEED treatment effects for balances in participant-owned accounts (the same as shown in the first column of Exhibit 5-1) for each
percentile, from the 75th percentile through the 99th percentile, of the participant-owned 529 plan savings distribution. The vertical axis in the figure measures the treatment versus control group difference in 529 assets (in dollars); the horizontal axis indicates the percentile (or quantile) of the distribution. The red dashed lines in Exhibit 5-1 are the boundaries of the 95% confidence intervals around the treatment effect estimates.\textsuperscript{57} As a visual reference, the short-dashed black line depicts a zero treatment effect, that is, no difference in account balances between treatment and control group members.

Exhibit 5-2 has three key features:

1. For the 1st through the 84th percentile of the participant-owned 529 asset distribution, the quantile treatment effects are zero because this segment of families did not open a 529 account. Hence, the blue line is horizontal at zero through the 84th percentile in the figure.

2. The estimated treatment effects are small (around $300) but statistically different from zero from the 85th through the 93rd percentiles.

3. The estimated treatment effects then rise substantially, topping out around $3,000.\textsuperscript{58} SEED had the largest impact on participant accumulations for the focal child at the very top of the distribution, i.e., among the biggest savers.

In summary, the mean treatment effect of $127 in Exhibit 5-1 is very unequally distributed. It can be thought of as a weighted average of no effect for the bottom 84%, a small effect for the next 10%, and then progressively larger effects for the top 6%.

The second column of Exhibit 5-1 shows a similar set of calculations for other-owned accounts, for which the simple difference between experimental groups was actually negative. However, this effect was small (-$58) and not statistically different from zero. The third column shows that the combined balances in private accounts were $70 higher for treatment group families relative to control group families; these differences were not statistically significant.

The fourth column of Exhibit 5-1 shows average balances from all SEED OK accounts (participant-, other-, and state-owned). The simple difference indicates that treatment group families had around $1,100 more accumulated for the focal child than did control group families, of which $1,000 is due to the initial SEED deposit into the state-owned account. The associated quantile treatment effects are shown in Exhibit 5-3. The impact of the SEED OK intervention was (by design) to raise plan balances by $1,000 for all treatment group members. The wedge in total 529 assets for the focal child between the two groups slowly increases starting at the 90th percentile and then rapidly increases and peaks at

\textsuperscript{57} These boundaries were calculated assuming the normal distribution based on 769 bootstrapped sample replications, generated through stratified random resampling with replacement, isomorphic to how the SEED experimental families were sampled from the Oklahoma birth records. This number of bootstrap samples was the optimal number assuming a normal distribution using the method of Andrews, D., & Buchinsky, M. (2000). A three-step method for choosing the number of bootstrap replications. \textit{Econometrica}, 68, 23-51.

\textsuperscript{58} The fanning out of the confidence intervals in the highest quantiles is a common feature of quantile regression.
almost $4,000 at the 98th percentile, then falls to $200 for the 99th percentile. This decline at the very top of the distribution is due to the greater balances in other-owned accounts in the control group, shown in column 2 of Exhibit 5-1.

**Exhibit 5-3. Quantile Treatment Effects on State- and Privately-owned 529 Assets for the Focal Child (based on administrative data)**

![Graph showing quantile treatment effects](image)

**Balances by Socioeconomic Characteristics**

Exhibit 5-4 shows treatment group account balances broken out by selected baseline sociodemographic characteristics of the family. Again, the results here are very clear and quite compelling. Across all metrics, there are strong gradients in account balances for treatment group families by mother’s age, education, race/ethnicity, marital status, and income. Education and age are the strongest predictors of assets in participant-owned accounts of the SEED OK experiment. For example, the second column shows that parents with more than a college degree have accumulated almost three times as much as those with a college degree in participant-owned accounts; in turn, those with a college degree accumulated about eight times as much as those with some college. Young, low-income, and unmarried parents, and those with less than a high school education accumulated very little in participant-owned accounts. The fourth column shows the average balance across any type of account. There, balances are distributed relatively more equally, almost wholly due to the $1,000 deposit into the state-owned account. Overall, treatment group families
with higher socioeconomic status were overwhelmingly more likely to have the largest balances for focal children in participant-owned accounts at the end of the SEED OK experimental period.

**Exhibit 5-4. Among All Treatment Group Members, Plan Balances for the Focal Child, by Selected Baseline Characteristics**

<table>
<thead>
<tr>
<th>Sample</th>
<th>Treatment Group Families (%)</th>
<th>Administrative Data, $</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Participant-owned Account</td>
</tr>
<tr>
<td>all families</td>
<td></td>
<td>152</td>
</tr>
<tr>
<td>age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>≤19</td>
<td>11.7</td>
<td>5</td>
</tr>
<tr>
<td>20–24</td>
<td>33.7</td>
<td>28</td>
</tr>
<tr>
<td>25–29</td>
<td>27.0</td>
<td>116</td>
</tr>
<tr>
<td>30–34</td>
<td>20.5</td>
<td>257</td>
</tr>
<tr>
<td>≥35</td>
<td>7.2</td>
<td>803</td>
</tr>
<tr>
<td>education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>less than high school</td>
<td>23.4</td>
<td>4</td>
</tr>
<tr>
<td>high school degree</td>
<td>30.5</td>
<td>29</td>
</tr>
<tr>
<td>some college</td>
<td>26.5</td>
<td>47</td>
</tr>
<tr>
<td>college degree</td>
<td>12.8</td>
<td>390</td>
</tr>
<tr>
<td>more than college</td>
<td>6.8</td>
<td>1,163</td>
</tr>
<tr>
<td>race</td>
<td></td>
<td></td>
</tr>
<tr>
<td>African American</td>
<td>8.9</td>
<td>27</td>
</tr>
<tr>
<td>Native American</td>
<td>11.4</td>
<td>80</td>
</tr>
<tr>
<td>Hispanic</td>
<td>13.0</td>
<td>19</td>
</tr>
<tr>
<td>other (white)</td>
<td>66.7</td>
<td>207</td>
</tr>
<tr>
<td>marital status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>not married</td>
<td>39.0</td>
<td>39</td>
</tr>
<tr>
<td>married</td>
<td>61.0</td>
<td>224</td>
</tr>
<tr>
<td>number of children</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>29.8</td>
<td>143</td>
</tr>
<tr>
<td>2</td>
<td>37.5</td>
<td>197</td>
</tr>
<tr>
<td>3 or more</td>
<td>32.7</td>
<td>109</td>
</tr>
<tr>
<td>household income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;$29,000</td>
<td>34.2</td>
<td>21</td>
</tr>
<tr>
<td>$29,000–$44,999</td>
<td>13.5</td>
<td>54</td>
</tr>
<tr>
<td>≥$45,000</td>
<td>49.3</td>
<td>263</td>
</tr>
</tbody>
</table>

**Impact of the Recession**

Much of the SEED OK demonstration period coincided with the recent global economic recession, so we examined whether the recession had an impact on account opening and
deposits into SEED accounts. The survey asked about experiences during the past 3 years, namely whether respondents or their spouse had\(^{59}\)

- lost a job or become unemployed,
- tried but couldn’t find a job,
- worked reduced salary or hours,
- not received a raise,
- taken a lower-paying job,
- trouble getting or paying for medical care for self or family,
- problems paying rent or mortgage.
- lost the house to foreclosure,
- increased credit card debt to help pay the bills,
- postponed getting married or having a baby, or
- moved to reduce housing expenses.

We found that among treatment group members, controlling for baseline characteristics, those who fared worse in the recession were not less likely to open a participant-owned account, nor less likely to deposit their own money into a SEED account.

6. **SEED SAVING IMPACTS**

One question regarding the impact of SEED OK is the extent to which deposits into SEED accounts represent net new saving. We now focus on this question and assess SEED OK impacts by comparing broader savings outcomes for treatment and control group members. Outcome data for the analyses in this chapter come solely from the follow-up survey because the analysis relies on information about all savings, not only the amounts in SEED OK 529 accounts. The major findings are as follows:

- It does not appear that SEED OK “crowded out” other saving for the focal child’s education at the mean. Some estimates suggest substantive crowd-out in the upper portion of the savings distribution, but some estimates are not precise enough to draw firm conclusions.
- The crowd-out from SEED OK is largest at the top of the savings distribution. At the 95th percentile, close to every dollar in all SEED accounts reduced other saving for the focal child’s education by a dollar.
- There was little estimated impact of SEED on saving for non-focal children’s education.
- Educational saving is a small part of household portfolios.
- The size of the SEED intervention (in terms of dollar amounts) is probably not large enough to detect impacts given the small part of saving devoted to education and the variability in saving across households.
- Impact estimates for broader measures of assets, debt, and net worth were not precise enough to draw firm conclusions.

**Impact on Saving for the Focal Child**

Although an important goal of SEED is to foster educational saving for the focal child, in principle SEED may increase or decrease total educational saving for the focal child.

- Saving could increase if SEED treatment group families save more because they lower expenses or raise earnings, thus making more of their own funds available for “new saving.” These changes could be for any of several reasons: in response to the SEED match, the preferred tax treatment of 529 plans, better access to financial institutions, or better understanding the need and ways to save for their child’s education.
- Saving for the focal child’s education may decrease if the parent has a target level of saving in mind or even just a basic principle to save something for the child’s education. SEED could alleviate that commitment. The initial $1,000 deposit and matching contributions could enable the parent to achieve the target (or principle) with less of their own funds.\(^{60}\)

Therefore, the impact of SEED OK on net worth is potentially complex and ambiguous.

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\(^{60}\) Economists refer to the first channel, whereby an increase in the after-tax rate of return increases one’s own saving, as the “substitution effect.” The second channel, whereby less one’s own saving is needed to achieve any fixed future target, is known as the “income effect.”
Exhibit 6-1 presents basic information on total assets accumulated by the parent for the focal child’s education. Because administrative data from TIAA-CREF measure only 529 account balances and not all educational saving for the focal child, the data for this exhibit come from respondent answers to questions asked during the follow-up survey. The outcome is the sum of all financial assets targeted to the focal child’s education, excluding 529 plan assets. The first column shows the mean outcome for the control group, which had accumulated an average of $515 for the focal child’s education by the end of the experiment. The second column shows the basic mean treatment effect, namely the difference between the mean accumulation for treatment and control group families, which is $-27, meaning that the treatment group had accumulated $27 less in non-529 financial assets for the focal child than the control group. With the average balance in all SEED OK accounts of $1,255 for the treatment group, this suggests that on average about 2 cents of every dollar of the SEED OK balance was offset by a reduction in other saving for the focal child. With a standard error of $123, this impact is not statistically different from zero at conventional levels of significance. Thus, we have no evidence of an effect of SEED OK on other savings for the focal child’s education, as indicated by statistical significance.

Exhibit 6-1. SEED OK Treatment Effects for Educational Saving for the Focal Child in Non-529 Plan Financial Assets (standard error) [p-value]

<table>
<thead>
<tr>
<th>Outcome (n = 2,190)</th>
<th>Control Group Mean</th>
<th>Estimated Treatment Effect (standard error) [p-value] measured at the...</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>(1)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>mean</td>
</tr>
<tr>
<td>educational saving for the focal child in financial assets (excluding 529 plan assets)</td>
<td>515</td>
<td>$-27 (123) [0.827]</td>
</tr>
</tbody>
</table>

Because there is no financial asset saving for the focal child’s education below the 80th percentile in this study, most families have only a few other assets to offset, so reductions in financial assets associated with the SEED OK treatment may be concentrated at top of the asset distribution. Thus, columns 3 through 5 in Exhibit 6-1 move beyond differences in means and show quantile treatment effects at the 85th, 90th, and 95th percentiles. The SEED OK impact at the 85th percentile is a reduction in non-529 financial assets of $100, which grows to a $1,000 reduction by the 95th percentile. Therefore, it appears that SEED OK

61 These assets included checking accounts; savings accounts; IRAs; retirement accounts (e.g., 401(k), 403(b), and similar plans); stocks or mutual funds; corporate, municipal, government, or foreign bonds; CDs; and money market accounts.
accumulations supplanted financial asset accumulation to some extent for the focal child’s education.

Exhibit 6-2 illustrates this for all the percentiles above the 80\textsuperscript{th}. The blue line in the figure shows the estimated quantile treatment effects (QTEs) for each percentile. The red lines mark the boundaries of the 95\% confidence intervals. These estimates show the same pattern as that in Exhibit 6-1: the higher in the distribution, the progressively larger the offsets to other financial assets accumulated for the focal child’s education, with close to full offset (−$1,000) at the top of the distribution.

**Exhibit 6-2. Quantile Treatment Effects for Educational Saving for the Focal Child in Non-529 Forms**

Exhibit 6-3 displays crowd-out estimates for the same quantiles. The blue line shows for each percentile the estimated fraction of each dollar of SEED OK accumulation that is offset, or crowded out, through a reduction in educational saving in non-529 forms. A value of zero indicates that each SEED dollar accumulated raised educational saving for the focal child dollar for dollar; a value of -1 indicates that each SEED dollar accumulated was offset by a one-dollar reduction in other forms of educational saving, resulting in no new overall saving for the focal child. Total SEED accumulations are measured as the sum of SEED OK 529 plan...
balances across all accounts for the focal child, as reported in the administrative data (i.e., the same measure as in the last column in Exhibit 5-1). \(^{62}\)

**Exhibit 6-3. Quantile Crowd-out Effects for Educational Saving for the Focal Child in Non-529 Forms**

For families in the bottom 85% of the saving distribution, SEED accumulations raised educational saving dollar for dollar for the focal child. Above the 85\(^{th}\) percentile, SEED accumulations are progressively crowded out by reductions in other forms of saving for the focal child: at the 86\(^{th}\) percentile, crowd-out is -0.09, or 9 cents per dollar, and rises steadily to -0.83, or 83 cents per dollar, at the 94\(^{th}\) percentile. At the highest five percentiles of the distribution, crowd-out averages -1, which says that at the very top of the distribution, SEED OK does not appear to raise educational saving overall for the focal child. The red lines mark the boundaries of the 95% confidence intervals. Hence, many of these estimates are not significantly different from zero crowd-out at the 5% level of significance.

\(^{62}\) These crowd-out estimates and confidence intervals were estimated using instrumental variable quantile regression, described in Appendix D.
Impact on Saving for Other Children

Saving for the education of non-focal children may increase or decrease due to SEED OK. It may increase if the incentives to save for the focal child have spillovers to other children in the family or if a sense of equity leads parents to save more for other children than they otherwise would have. Alternatively, saving for other children may decrease if contributions to SEED come from funds that would have been used to save for education for these other children (i.e., crowd-out saving for non-focal children).

Exhibit 6-4 presents estimated treatment effects for educational saving for non-focal children, that is, other children both in and outside of the household. This outcome measure includes 529 plan assets for these children. Here the sample is limited to families in which the focal child had at least one sibling at baseline. Any type of spillover or crowd-out might be strongest for families in the study with multiple children. The treatment effect estimates are mostly negative and relatively large at the top end of the distribution, but none are statistically different than zero. Overall, the results for other children suggest crowding out, but the estimates are not precise enough (because of large standard errors, meaning wide variance) to make firm conclusions. Exhibit 6-5 plots the quantile treatment effects and 95% confidence intervals for all quantiles at the top of the saving distribution.

Exhibit 6-4. SEED OK Treatment Effects for Educational Saving for Non-Focal Children (standard error) [p-value]

<table>
<thead>
<tr>
<th>Outcome (n = 1,492)</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>mean</td>
<td>85th percentile</td>
<td>90th percentile</td>
<td>95th percentile</td>
</tr>
<tr>
<td>Control Group Mean</td>
<td>$1,561</td>
<td>−$45 ($345) [0.90]</td>
<td>−$200 ($470) [0.67]</td>
<td>0 ($900) [1.00]</td>
<td>−$2,000 ($3,146) [0.53]</td>
</tr>
</tbody>
</table>

Note: This analysis uses the subsample of focal children with siblings at baseline.

Impact on Broader Measures of Assets and Debts

The analysis above suggests that at least some SEED OK accumulation was offset through reduced educational saving for the focal child in other financial assets. In this section, we change the definition of assets to see if these effects appear in assets that are more broadly defined.

The analysis begins with Exhibit 6-6. The outcome measure now is financial assets accumulated for all purposes, not just the education of the focal child. SEED OK is
associated with an increase in financial assets saved for all purposes, although these estimates are imprecise and none are statistically different than zero. This stands in contrast to the narrower crowd-out results in Exhibits 6-1 and 6-2.

**Exhibit 6-5. Quantile Treatment Effects for Educational Saving for Non-Focal Children**

![Graph showing quantile treatment effects for educational saving for non-focal children.]

**Exhibit 6-6. Treatment Effects for Financial Assets Excluding 529 Plan Assets for All Purposes (standard error) [p-value]**

<table>
<thead>
<tr>
<th>Outcome (n = 1,912)</th>
<th>(1) Mean</th>
<th>(2) Mean</th>
<th>(3) 85th percentile</th>
<th>(4) 90th percentile</th>
<th>(5) 95th percentile</th>
</tr>
</thead>
<tbody>
<tr>
<td>financial assets, excluding 529 plan assets</td>
<td>$18,722 ($2,916) [0.804]</td>
<td>$724 ($5,293) [0.637]</td>
<td>$2,500 ($9,822) [0.799]</td>
<td>$2,500 ($9,822) [0.799]</td>
<td>$9,100 ($23,798) [0.702]</td>
</tr>
</tbody>
</table>
Part of the reason for the imprecision is that saving for the focal child is a very small proportion of all saving in these families. This can be seen by comparing the average amount of financial assets for the focal child’s education in the control group of $515 (in Exhibit 6-1) and the average amount of financial assets held in the control group for any purpose of $18,722 (in Exhibit 6-6). The ratio of these averages is 2.5%. Even among the subgroup of families with positive financial assets, the average ratio of educational to all saving is less than 10%. The SEED OK treatment turns out to be highly targeted because educational saving is a small piece of the overall wealth portfolio of the households in the study. Consequently, it is difficult to detect SEED impacts in the broader measure of financial assets in Exhibit 6-6.

Exhibit 6-7 confirms this by showing basic mean treatment effects for four other measures: (1) assets that are not financial instruments and not owner-occupied housing (e.g., businesses, land and rental real estate, all other assets); (2) home equity (owner-occupied housing value minus mortgage debt); (3) all debt other than housing (all nonmortgage debt); and (4) net worth (total assets less total debt). The treatment effects are very small for home equity, and negative for the other measures, including net worth. All of these impacts are imprecisely estimated as shown by the large standard errors, so no firm conclusions can be drawn about SEED OK’s impact on broader financial measures.

**Exhibit 6-7. Treatment Effects for Nonfinancial Assets, Debt, and Net Worth (standard error) [p-value]**

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Control group mean</th>
<th>Estimated Treatment Effect (standard error) [p-value]</th>
</tr>
</thead>
<tbody>
<tr>
<td>nonfinancial nonhousing assets</td>
<td>$27,702</td>
<td>-$575 ($12,319) [0.963]</td>
</tr>
<tr>
<td>(n=1,994)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>nonhousing debt</td>
<td>$33,132</td>
<td>-$4,102 ($5,531) [0.458]</td>
</tr>
<tr>
<td>(n=2,033)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>housing equity</td>
<td>$25,499</td>
<td>$42 ($2,888) [0.988]</td>
</tr>
<tr>
<td>(n=2,142)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>net worth</td>
<td>$42,476</td>
<td>-$12,806 ($11,722) [0.275]</td>
</tr>
<tr>
<td>(n=1,553)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
7. PSYCHOSOCIAL AND EDUCATIONAL OUTCOMES

Assets may be associated with positive psychosocial and educational outcomes. For instance, research shows links between non-income assets and the quality of the home environment, an orientation toward the future, and educational attainment. One study has reported that participants with individual development accounts (IDAs) felt more confident about their futures and more in control of their lives because of their savings accounts.

Much of the current research examining the impact of assets is based on older children or young adults, particularly when the outcome is educational attainment. Whether assets such as 529 accounts have a positive effect on families of young children remains unanswered. Because the focal children for the SEED OK study are young, we examined the psychological well-being, future orientation, and attitudes toward parenting of the survey respondent (almost always the child’s mother).

In this chapter, we focus on the effects of SEED OK on six psychosocial and educational constructs:

1. Optimism, as measured by the Life Orientation Test–Revised (LOT-R), which is a scale that assesses general optimism versus pessimism;
2. Depression, using the CES-D (Center for Epidemiological Studies Scales–Depression), which is a four-item scale that measures depression in a general population;
3. Attitudes about parenting, by using four items from the Parenting Stress Index that address how parents feel about parenting;
4. Educational resources available in the home;


5. Orientation toward the future, by asking about the caregiver’s expectations for the child’s financial situation as an adult and educational attainment, including the importance of college; and

6. Child behavior, as measured by parent reports on a subset of questions from the Ages and Stages Questionnaire.

This chapter presents the questions we addressed, the analytic methods, an analysis of each of the six constructs, whether treatment group members who did and did not open their own 529 accounts had different psychosocial and educational outcomes, and whether economic pressures were similar for treatment and control group members. These findings will contribute to understanding whether assets such as a 529 account impact families of young children. The major findings are as follows:

- The analysis shows no statistically significant differences between treatment and control group members on any of the six psychosocial constructs, for either the full sample or in any of the four racial/ethnic subgroups.
- An examination of individual psychosocial indicators found statistically significant differences for two parenting attitude indicators in two racial/ethnic groups, but small cell sizes mean these tests are probably not valid.
- Treatment and control group members show no differences regarding the impact the recession had on their psychosocial indicators.

Questions Addressed

To assess SEED OK’s impacts on psychosocial and educational outcomes, we examined whether the initiative had an impact on the (1) sample members as a whole (treatment and control groups) and (2) four racial/ethnic subgroups represented in the sample.

We had initially planned to determine whether SEED OK had impacts on psychosocial outcomes for treatment and control group members who had participant-owned 529 accounts because they may have had differential outcomes. These analyses could not be conducted because so few control group members had participant-owned 529 accounts that the analyses would not be robust. However, we are able to compare treatment group members who opened their own account to treatment group members who did not.70

Analytic Methods

To analyze the psychosocial and educational outcomes, we first examined questions asked of respondents about depression, optimism, attitudes toward parenting, educational materials in the home, future orientation, and child behavior. These psychosocial outcomes are latent variables and, as discussed in Chapter 2, are different than economic outcomes

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70 Because these analyses are not derived from randomly assigned study participants (treatment group members could choose to open or not open an account), we control for background characteristics that could affect outcome measures. All other analyses in this chapter do not control for background characteristics because, as discussed previously, random assignment sufficiently equalized the groups and there was no differential attrition between treatment and control group members. Appendix D provides adjusted analyses for interested readers.
so we combined the individual indicators into structural equation models (SEMs) that examined the overall latent construct. The SEM analyses look at impacts for the entire SEED OK sample, then apply the same analyses to each racial/ethnic subgroup: African American, American Indian, Hispanic, and other (predominantly white).

Before testing the impacts of SEED OK on each construct, we examined indicator distributions for measurement adequacy for all outcome measures. When cell sizes were too small (as they were for items on the CES-D, attitudes about parenting, and future orientation), response categories were collapsed. Appendix E contains details, along with discussion of decisions we made regarding our approach to the analyses presented in this chapter.

**Parental Well-being**

**Optimism**

We used the LOT-R, modified for use in a telephone survey, to measure parental well-being. We adapted the LOT-R to make a three-response scale from 0 (disagree) to 2 (agree) to measure differences in optimism versus pessimism, using the items listed in Exhibit 7-1. Three items are reverse scored. High total scores indicate greater optimism.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Group</th>
<th>Agree</th>
<th>Neither Agree Nor Disagree</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>In uncertain times, I usually expect the best.</td>
<td>Treatment</td>
<td>80.4</td>
<td>12.6</td>
<td>7.0</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>81.0</td>
<td>11.7</td>
<td>7.3</td>
</tr>
<tr>
<td>If something can go wrong for me, it will.</td>
<td>Treatment</td>
<td>25.0</td>
<td>18.8</td>
<td>56.2</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>26.5</td>
<td>21.8</td>
<td>51.7</td>
</tr>
<tr>
<td>I'm always optimistic about my future.</td>
<td>Treatment</td>
<td>80.0</td>
<td>11.3</td>
<td>8.7</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>77.7</td>
<td>13.6</td>
<td>8.7</td>
</tr>
<tr>
<td>I hardly ever expect things to go my way.</td>
<td>Treatment</td>
<td>15.4</td>
<td>11.9</td>
<td>73.0</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>15.3</td>
<td>11.6</td>
<td>73.1</td>
</tr>
<tr>
<td>I rarely count on good things happening to me.</td>
<td>Treatment</td>
<td>18.4</td>
<td>15.3</td>
<td>66.3</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>18.4</td>
<td>14.6</td>
<td>67.1</td>
</tr>
<tr>
<td>Overall, I expect more good things to happen to me than bad.</td>
<td>Treatment</td>
<td>85.3</td>
<td>8.8</td>
<td>6.0</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>84.5</td>
<td>8.2</td>
<td>7.4</td>
</tr>
</tbody>
</table>

71 All analyses incorporated sampling weights and stratification variables. Because a large number of comparisons were conducted, the likelihood of Type I error (false positives) would be high unless a correction is used. We control for this potential problem by using the Bonferroni method. The tables provide the actual significance value; to determine whether a particular test is significant, we used a criterion of p < .01. We have included the exact p values so that readers may determine for themselves whether to control for the number of comparisons.


73 Nonscored items were removed from the scale and response options were reduced from five (strongly agree, agree, neutral, disagree, and strongly disagree) to three (agree, neither agree nor disagree, and disagree).
Both treatment and control group participants were generally optimistic (Exhibit 7-1). Between 50% and 85% of each sample provided the most optimistic response to each indicator. A comparison of responses to the statement, “I am always optimistic about my future,” shows no differences between treatment and control groups ($\chi^2 = 2.15$, $p = .3416$). In terms of overall optimism, no differences were detected between treatment and control groups for the sample as a whole or within any subgroup (Exhibit 7-2).

**Exhibit 7-2. SEM Coefficients: Difference in Optimism for Treatment and Control Group Members**

<table>
<thead>
<tr>
<th>Group</th>
<th>Coefficient</th>
<th>S.E.</th>
<th>Test Statistic</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>full sample</td>
<td>−0.006</td>
<td>0.010</td>
<td>−0.632</td>
<td>0.527</td>
</tr>
<tr>
<td>African American</td>
<td>−0.019</td>
<td>0.027</td>
<td>−0.685</td>
<td>0.493</td>
</tr>
<tr>
<td>American Indian</td>
<td>−0.013</td>
<td>0.022</td>
<td>−0.597</td>
<td>0.551</td>
</tr>
<tr>
<td>Hispanic</td>
<td>0.006</td>
<td>0.031</td>
<td>0.206</td>
<td>0.837</td>
</tr>
<tr>
<td>other (white)</td>
<td>0.000</td>
<td>0.022</td>
<td>0.016</td>
<td>0.987</td>
</tr>
</tbody>
</table>

**Depression**


This modified CES-D has four items asked at baseline and follow-up (Exhibit 7-3). The items ask about feelings in the past 30 days; higher scores indicate greater depressive symptoms. Most respondents reported that they did not experience crying spells or feeling depressed or lonely at any time in the past month. Approximately one-third reported never feeling sad in the previous month. As an example of parental well-being, we examined one indicator, “I felt sad,” and did not detect any statistical difference between treatment and control group members for the full sample ($p = 0.237$) or for any subgroup. There are no differences in depressive symptoms between treatment and control group respondents ($p = 0.132$) either in the full sample or in the four subgroups (Exhibit 7-4).

Thus, SEED OK data show that having a 529 account for the focal child does not affect the mother’s feelings of well-being, as measured by items asked in the SEED OK survey.

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75 These results are generally in line with findings from the Michigan SEED impact study in which no significant differences were detected between the treatment and comparison groups. See Marks et al., op cit.
Exhibit 7-3.  Depression Indicators (in percents)

<table>
<thead>
<tr>
<th>Item</th>
<th>Group</th>
<th>None of the time</th>
<th>Some of the time</th>
<th>Most of the time</th>
<th>All of the time</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>I felt depressed.</em></td>
<td>Treatment</td>
<td>51.4</td>
<td>44.0</td>
<td>3.8</td>
<td>0.9</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>49.9</td>
<td>43.2</td>
<td>5.2</td>
<td>1.6</td>
</tr>
<tr>
<td><em>I felt lonely.</em></td>
<td>Treatment</td>
<td>67.6</td>
<td>29.1</td>
<td>2.9</td>
<td>0.5</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>66.4</td>
<td>28.2</td>
<td>4.3</td>
<td>1.1</td>
</tr>
<tr>
<td><em>I had crying spells.</em></td>
<td>Treatment</td>
<td>70.1</td>
<td>27.8</td>
<td>1.5</td>
<td>0.6</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>69.5</td>
<td>27.6</td>
<td>2.1</td>
<td>0.8</td>
</tr>
<tr>
<td><em>I felt sad.</em></td>
<td>Treatment</td>
<td>39.0</td>
<td>57.8</td>
<td>3.1</td>
<td>0.1</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>36.4</td>
<td>59.0</td>
<td>4.1</td>
<td>0.6</td>
</tr>
</tbody>
</table>

Exhibit 7-4.  SEM Coefficients: Difference in Depression for Treatment and Control Group Members

<table>
<thead>
<tr>
<th>Group</th>
<th>Coefficient</th>
<th>S.E.</th>
<th>Test Statistic</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>full sample</td>
<td>−0.067</td>
<td>0.044</td>
<td>−1.508</td>
<td>0.132</td>
</tr>
<tr>
<td>African American</td>
<td>−0.030</td>
<td>0.103</td>
<td>−0.288</td>
<td>0.774</td>
</tr>
<tr>
<td>American Indian</td>
<td>−0.173</td>
<td>0.108</td>
<td>−1.605</td>
<td>0.109</td>
</tr>
<tr>
<td>Hispanic</td>
<td>−0.092</td>
<td>0.104</td>
<td>−0.883</td>
<td>0.377</td>
</tr>
<tr>
<td>other (white)</td>
<td>−0.049</td>
<td>0.060</td>
<td>−0.823</td>
<td>0.411</td>
</tr>
</tbody>
</table>

Attitudes about Parenting

We used four items from the Parenting Stress Index\textsuperscript{76} to assess satisfaction with the respondent’s role as a parent or caregiver (Exhibit 7-5). Two items are reverse scored; higher scores represent greater satisfaction with the role of parent. Nearly all respondents in both the treatment and control groups indicated that they were happy with their role as a parent and enjoyed the time they spent with their children. Most mothers said that they have too little time for themselves, and more than 20% said they feel overwhelmed by parental responsibilities.

Exhibit 7-5. Indicators of Attitudes about Parenting (in percents)

<table>
<thead>
<tr>
<th>Item</th>
<th>Group</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>I am happy with my role as a parent.</em></td>
<td>Treatment</td>
<td>73.8</td>
<td>25.4</td>
<td>0.5</td>
<td>0.3</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>75.6</td>
<td>23.5</td>
<td>0.8</td>
<td>0.2</td>
</tr>
<tr>
<td><em>In my role as a parent, I often find that I have too little time for myself.</em></td>
<td>Treatment</td>
<td>18.5</td>
<td>45.9</td>
<td>30.2</td>
<td>5.4</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>18.3</td>
<td>47.4</td>
<td>30.4</td>
<td>3.9</td>
</tr>
<tr>
<td><em>As a parent, I enjoy the time I spend with my [child/ren].</em></td>
<td>Treatment</td>
<td>81.2</td>
<td>18.6</td>
<td>0.1</td>
<td>0.1</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>82.1</td>
<td>17.6</td>
<td>0.3</td>
<td>0.1</td>
</tr>
<tr>
<td><em>I feel overwhelmed with the responsibilities of being a parent.</em></td>
<td>Treatment</td>
<td>2.5</td>
<td>19.0</td>
<td>51.5</td>
<td>27.0</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>3.5</td>
<td>21.9</td>
<td>47.6</td>
<td>27.1</td>
</tr>
</tbody>
</table>

In addition to the individual item tests between treatment and control for the entire sample shown in Exhibit 7-5, we examined the item differences between treatment and control for each of the four subgroups. Out of 20 tests of the individual indicators at the group level (4 items x 5 groups—overall and 4 subgroups), no differences were detected in 16 comparisons. The remaining four had so little variance and such small cell sizes that tests of statistical significance were not valid.

We also found no treatment-related differences for the parenting attitudes construct either in the full sample \( (p = 0.750) \) or in any subgroup (Exhibit 7-6). We conclude that having a 529 account for their child does not impact mothers’ attitudes toward parenting.\(^{77}\)

Exhibit 7-6. SEM Coefficients: Differences in Parenting Attitudes between Treatment and Control Group Members

<table>
<thead>
<tr>
<th>Group</th>
<th>Coefficient</th>
<th>S.E.</th>
<th>Test Statistic</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>full sample</td>
<td>0.016</td>
<td>0.050</td>
<td>0.318</td>
<td>0.750</td>
</tr>
<tr>
<td>African American</td>
<td>−0.022</td>
<td>0.098</td>
<td>−0.221</td>
<td>0.825</td>
</tr>
<tr>
<td>American Indian</td>
<td>−0.129</td>
<td>0.135</td>
<td>−0.956</td>
<td>0.339</td>
</tr>
<tr>
<td>Hispanic</td>
<td>0.164</td>
<td>0.135</td>
<td>1.219</td>
<td>0.223</td>
</tr>
<tr>
<td>other (white)</td>
<td>0.012</td>
<td>0.060</td>
<td>0.203</td>
<td>0.839</td>
</tr>
</tbody>
</table>

\(^{77}\) These results parallel the findings in the Michigan SEED impact study in which the treatment and comparison groups did not differ on parenting attitudes.
Educational Resources in the Home

The survey asked four questions about educational materials and activities in the home: a computer, Internet service, children’s books, and reading to the child (Exhibit 7-7). About three-quarters of treatment and control group members have a home computer and more than two-thirds have Internet service. The vast majority (88%) have more than 10 children’s books. Almost all respondents (97% of treatment, 96% of control) reported reading to their child at least 1 day in the previous week; more than one-third reported reading nearly every day.

Below each indicator in Exhibit 7-7 are the statistics that test whether the treatment and control group members differed. We found no treatment-related differences in educational resources either in the full sample (p = 0.866) or in any of the subgroups (Exhibit 7-8). These results suggest that having a SEED account does not result in more educational resources.  

Exhibit 7-8. SEM Coefficients: Differences in Home Educational Resources for Treatment and Control Group Members

<table>
<thead>
<tr>
<th>Group</th>
<th>Coefficient</th>
<th>S.E.</th>
<th>Test Statistic</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>full sample</td>
<td>0.004</td>
<td>0.026</td>
<td>0.169</td>
<td>0.866</td>
</tr>
<tr>
<td>African American</td>
<td>0.032</td>
<td>0.048</td>
<td>0.667</td>
<td>0.505</td>
</tr>
<tr>
<td>American Indian</td>
<td>−0.010</td>
<td>0.033</td>
<td>−0.298</td>
<td>0.766</td>
</tr>
<tr>
<td>Hispanic</td>
<td>0.002</td>
<td>0.049</td>
<td>0.044</td>
<td>0.965</td>
</tr>
<tr>
<td>other (white)</td>
<td>0.016</td>
<td>0.033</td>
<td>0.469</td>
<td>0.639</td>
</tr>
</tbody>
</table>

78 These findings also paralleled what we found in the Michigan SEED impact study.
Orientation Toward the Future

We measured future orientation with survey questions about the respondent’s expectations for their child’s financial situation as an adult and for educational attainment, plus questions about the importance of college in general and for the focal child specifically (Exhibit 7-9). The vast majority stated that they believe in the importance of a college education generally and in their child attending college. Respondents also said that they were optimistic about their children’s academic and financial future, with over 90% expecting that their child will go to college/graduate school and that they will find a way to pay for it.

Exhibit 7-9. Future Orientation Indicators (in percent)

<table>
<thead>
<tr>
<th>Item</th>
<th>Treatment</th>
<th>Control</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>expectations for child’s financial situation when grown</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>better than yours</td>
<td>85.9</td>
<td>84.0</td>
<td>0.485</td>
</tr>
<tr>
<td>about the same as yours</td>
<td>13.6</td>
<td>15.5</td>
<td></td>
</tr>
<tr>
<td>worse than yours</td>
<td>0.6</td>
<td>0.5</td>
<td></td>
</tr>
<tr>
<td>expectations for educational attainment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;high school</td>
<td>0.1</td>
<td>—</td>
<td>0.405</td>
</tr>
<tr>
<td>graduate from high school</td>
<td>3.6</td>
<td>5.3</td>
<td></td>
</tr>
<tr>
<td>vocational/business school</td>
<td>2.2</td>
<td>2.5</td>
<td></td>
</tr>
<tr>
<td>college</td>
<td>68.2</td>
<td>67.3</td>
<td></td>
</tr>
<tr>
<td>graduate school</td>
<td>25.9</td>
<td>24.9</td>
<td></td>
</tr>
<tr>
<td>importance of a college education</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>very important</td>
<td>88.7</td>
<td>88.8</td>
<td>0.996</td>
</tr>
<tr>
<td>somewhat important</td>
<td>10.8</td>
<td>10.6</td>
<td></td>
</tr>
<tr>
<td>not very important</td>
<td>0.6</td>
<td>0.6</td>
<td></td>
</tr>
<tr>
<td>likelihood that family will work out costs of college for child</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>very likely</td>
<td>65.5</td>
<td>66.9</td>
<td>0.900</td>
</tr>
<tr>
<td>somewhat likely</td>
<td>28.1</td>
<td>27.4</td>
<td></td>
</tr>
<tr>
<td>somewhat unlikely</td>
<td>4.3</td>
<td>3.8</td>
<td></td>
</tr>
<tr>
<td>not very likely</td>
<td>2.1</td>
<td>1.9</td>
<td></td>
</tr>
<tr>
<td>importance of child going to college</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>very important</td>
<td>87.49</td>
<td>86.2</td>
<td>0.699</td>
</tr>
<tr>
<td>somewhat important</td>
<td>11.60</td>
<td>12.9</td>
<td></td>
</tr>
<tr>
<td>not very important</td>
<td>0.92</td>
<td>0.9</td>
<td></td>
</tr>
</tbody>
</table>
We examined responses to individual items with the full sample, and they show no statistically significant differences between treatment and control group members. Because nearly all respondents had a positive response to the questions about future orientation, the lack of variance and reduced overall sample size for each subgroup resulted in very small cell sizes so we could not conduct valid tests to determine whether SEED OK resulted in any statistically significant differences.

We found no statistical differences in the future orientation between the full sample of the treatment and control groups. The same holds for the future orientation for all subgroups (Exhibit 7-10).  

**Exhibit 7-10. SEM Coefficients: Differences in Future Orientation for Treatment and Control Group Members**

<table>
<thead>
<tr>
<th>Group</th>
<th>Coefficient</th>
<th>S.E.</th>
<th>Test Statistic</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>full sample</td>
<td>0.039</td>
<td>0.052</td>
<td>0.756</td>
<td>0.450</td>
</tr>
<tr>
<td>African American</td>
<td>0.128</td>
<td>0.101</td>
<td>1.258</td>
<td>0.208</td>
</tr>
<tr>
<td>American Indian</td>
<td>0.234</td>
<td>0.117</td>
<td>2.005</td>
<td>0.045</td>
</tr>
<tr>
<td>Hispanic</td>
<td>0.152</td>
<td>0.175</td>
<td>0.865</td>
<td>0.387</td>
</tr>
<tr>
<td>other (white)</td>
<td>0.010</td>
<td>0.064</td>
<td>0.150</td>
<td>0.881</td>
</tr>
</tbody>
</table>

**Child Behavior**

We measured child behavior using 17 items from the Ages and Stages Questionnaire—Social/Emotional Scale. Ages and Stages is a widely used standardized tool that screens for potential social and emotional developmental problems in young children. Parents rate aspects of their children’s behavior on the following scale: rarely or never (0), sometimes (1), or most of the time (2). Positively worded items are reverse scored so that when all items are totaled, lower scores represent more optimal development. Exhibit 7-11 presents the items and survey participants’ responses. Using the Bonferroni correction, one statistically significant difference was found: control group children are more likely than treatment group children to cry, scream, or have tantrums for long periods of time, but since there is little obvious connection between this behavioral outcome and the SEED OK treatment, we judge the result to be spurious. Results of the SEM analysis shown in Exhibit 7-12 indicate that the children in the SEED OK treatment group were similar in behavioral development to children in the control group; these results were found for both all children as a whole group and the individual racial/ethnic subgroups.

---

79 Two of the future orientation items did not show sufficient association with the primary construct of interest in the analysis of treatment effects. These items asked about how hopeful their family's financial situation is and expectations for their child's financial future. Also, the p value for American Indians is not significant due to the Bonferroni correction.

80 The significance criterion is ≤ .003.
# Exhibit 7-11. Child Behavior as Measured through Selected Items from Ages and Stages (in percent)

<table>
<thead>
<tr>
<th>How often does child ...</th>
<th>Most of the Time</th>
<th>Sometimes</th>
<th>Rarely or Never</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Treatment</td>
<td>Control</td>
<td>Treatment</td>
<td>Control</td>
</tr>
<tr>
<td>talk or play with adults</td>
<td>86.3</td>
<td>85.9</td>
<td>12.0</td>
<td>12.5</td>
</tr>
<tr>
<td>calm down when upset</td>
<td>72.2</td>
<td>69.4</td>
<td>23.5</td>
<td>26.0</td>
</tr>
<tr>
<td>seem too friendly with strangers</td>
<td>13.7</td>
<td>14.3</td>
<td>27.1</td>
<td>28.7</td>
</tr>
<tr>
<td>settle down after exciting activity</td>
<td>57.5</td>
<td>55.4</td>
<td>36.5</td>
<td>37.6</td>
</tr>
<tr>
<td>cry, scream, or have tantrums for long periods of time</td>
<td>4.6</td>
<td>8.2</td>
<td>33.2</td>
<td>31.5</td>
</tr>
<tr>
<td>enjoy meal times together with you</td>
<td>92.2</td>
<td>90.5</td>
<td>7.6</td>
<td>8.4</td>
</tr>
<tr>
<td>do what you ask</td>
<td>57.6</td>
<td>57.8</td>
<td>37.4</td>
<td>37.6</td>
</tr>
<tr>
<td>seem more active than other children the same age</td>
<td>45.5</td>
<td>44.8</td>
<td>34.8</td>
<td>35.5</td>
</tr>
<tr>
<td>stay with activities s/he enjoys for at least 10 minutes</td>
<td>76.4</td>
<td>74.7</td>
<td>20.0</td>
<td>21.4</td>
</tr>
<tr>
<td>move from one activity to the next with little difficulty</td>
<td>63.0</td>
<td>61.0</td>
<td>31.8</td>
<td>33.7</td>
</tr>
<tr>
<td>do things over and over and can’t seem to stop</td>
<td>7.6</td>
<td>7.4</td>
<td>12.5</td>
<td>12.2</td>
</tr>
<tr>
<td>follow rules</td>
<td>69.0</td>
<td>70.4</td>
<td>28.3</td>
<td>26.4</td>
</tr>
<tr>
<td>destroy or damage things on purpose</td>
<td>2.3</td>
<td>1.8</td>
<td>14.8</td>
<td>15.2</td>
</tr>
<tr>
<td>name a friend</td>
<td>84.4</td>
<td>79.6</td>
<td>11.5</td>
<td>15.6</td>
</tr>
<tr>
<td>have other children like to play with him/her</td>
<td>92.0</td>
<td>90.4</td>
<td>7.3</td>
<td>8.9</td>
</tr>
<tr>
<td>like to play with other children</td>
<td>87.9</td>
<td>88.8</td>
<td>10.7</td>
<td>9.8</td>
</tr>
<tr>
<td>try to hurt other children, adults, or animals</td>
<td>0.8</td>
<td>0.8</td>
<td>8.6</td>
<td>7.2</td>
</tr>
</tbody>
</table>

# Exhibit 7-12. SEM Coefficients: Differences in Ages and Stages for Treatment and Control Group Members

<table>
<thead>
<tr>
<th>Group</th>
<th>Coefficient</th>
<th>S.E.</th>
<th>Test Statistic</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>full sample</td>
<td>-0.031</td>
<td>0.038</td>
<td>-0.824</td>
<td>0.410</td>
</tr>
<tr>
<td>African American</td>
<td>-0.096</td>
<td>0.092</td>
<td>-1.045</td>
<td>0.296</td>
</tr>
<tr>
<td>American Indian</td>
<td>-0.125</td>
<td>0.092</td>
<td>-1.350</td>
<td>0.177</td>
</tr>
<tr>
<td>Hispanic</td>
<td>-0.074</td>
<td>0.076</td>
<td>-0.980</td>
<td>0.327</td>
</tr>
<tr>
<td>other (white)</td>
<td>0.006</td>
<td>0.051</td>
<td>0.109</td>
<td>0.913</td>
</tr>
</tbody>
</table>
We present the means and standard deviations for two behavioral areas in Exhibit 7-11.\textsuperscript{81} The analysis indicates that children in the SEED OK treatment group were similar in behavioral development to children in the control group. No statistically significant differences were detected by subgroups (data not shown).

**Impact of 529 Accounts on Psychosocial Outcomes**

We analyzed whether treatment group members who did and did not open their own 529 accounts have similar types of psychosocial outcomes. We controlled for background characteristics (i.e., race/ethnicity, education, marital status, employment status, and number of children), and financial status (i.e., income, bank account ownership, home ownership, credit card possession, and assets) that could impact outcomes. We then used logistic regression to compare results for those with and without 529 accounts (data tables are provided in Appendix F).\textsuperscript{82} We performed analyses on the group as a whole and then by subgroup. Our analyses showed no differences in terms of optimism, depression, attitudes about parenting, future orientation, or educational assets. The same general pattern held for racial/ethnic subgroups (although cell sizes were often too small for statistical testing) with one exception: American Indians with their own 529 accounts have more children’s books than those who do not have a 529 account.

**Impact of the Recession**

Because the SEED OK evaluation was conducted during the global recession from 2007 to 2012, we examined whether economic pressures such as losing a job, having a house foreclosed, or having trouble paying bills were similar for treatment and control group members. We compared responses to several items, listed in Exhibit 7-12, which shows similar responses for both groups. All chi-square tests were nonsignificant, suggesting that treatment and control group members had similar experiences with the recession. Because we found no significant differences between treatment and control group members, no measures of the recession were used as controls in the analysis of treatment impacts.

**Summary**

SEED OK had virtually no impact on psychosocial and educational outcomes at the time of the follow-up survey. The only statistically significant differences we detected were at the indicator level for individual race/ethnicity subgroups, and these were rare and inconsistent. None of the six overarching constructs show differences between treatment and control

\textsuperscript{81} The original Ages & Stages scale is multidimensional with seven behavioral areas, of which the SEED OK evaluation included three. The SEM analysis requires a unidimensional outcome, so we ran an exploratory factor analysis to identify the items that best fit a unidimensional measure. The factor analysis resulted in a unidimensional outcome with items from two of the Ages & Stages behavioral areas—self-regulation and compliance.

\textsuperscript{82} As with the other analyses, we used a Bonferroni correction to control for the number of statistical tests at the construct level.
group members, and the few lower-level indicators that are statistically significant do not show a consistent pattern.

**Exhibit 7-12. Impact of the Recession on Study Participants**

<table>
<thead>
<tr>
<th>Item</th>
<th>Response</th>
<th>Percent</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Control</td>
<td>Treatment</td>
</tr>
<tr>
<td>During the past 12 months, did your family ...</td>
<td>always have enough to eat</td>
<td>88.0</td>
<td>87.6</td>
</tr>
<tr>
<td></td>
<td>sometimes not have enough</td>
<td>11.4</td>
<td>11.3</td>
</tr>
<tr>
<td></td>
<td>often not have enough to eat</td>
<td>0.6</td>
<td>1.1</td>
</tr>
<tr>
<td>During the past 12 months, has your family’s financial situation ...</td>
<td>gotten better</td>
<td>41.9</td>
<td>40.2</td>
</tr>
<tr>
<td></td>
<td>gotten worse</td>
<td>13.0</td>
<td>15.3</td>
</tr>
<tr>
<td></td>
<td>stayed the same</td>
<td>45.1</td>
<td>44.5</td>
</tr>
<tr>
<td>How hopeful is your family’s financial situation?</td>
<td>very hopeful</td>
<td>53.4</td>
<td>50.5</td>
</tr>
<tr>
<td></td>
<td>somewhat hopeful</td>
<td>41.9</td>
<td>43.9</td>
</tr>
<tr>
<td></td>
<td>not very hopeful</td>
<td>4.7</td>
<td>5.6</td>
</tr>
<tr>
<td><strong>During the past 3 years have you (or your spouse) ...</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>lost a job or became unemployed</td>
<td>yes</td>
<td>40.6</td>
<td>41.4</td>
</tr>
<tr>
<td></td>
<td>no</td>
<td>59.4</td>
<td>58.6</td>
</tr>
<tr>
<td>tried but couldn’t find a job</td>
<td>yes</td>
<td>34.3</td>
<td>32.0</td>
</tr>
<tr>
<td></td>
<td>no</td>
<td>65.8</td>
<td>68.0</td>
</tr>
<tr>
<td>had salary or hours reduced</td>
<td>yes</td>
<td>28.0</td>
<td>30.6</td>
</tr>
<tr>
<td></td>
<td>no</td>
<td>72.0</td>
<td>69.4</td>
</tr>
<tr>
<td>not received a raise</td>
<td>yes</td>
<td>29.5</td>
<td>32.7</td>
</tr>
<tr>
<td></td>
<td>no</td>
<td>70.5</td>
<td>67.3</td>
</tr>
<tr>
<td>taken a lower-paying job</td>
<td>yes</td>
<td>24.4</td>
<td>24.9</td>
</tr>
<tr>
<td></td>
<td>no</td>
<td>75.7</td>
<td>75.2</td>
</tr>
<tr>
<td>had trouble getting or paying for medical care for self or family</td>
<td>yes</td>
<td>28.9</td>
<td>30.8</td>
</tr>
<tr>
<td></td>
<td>no</td>
<td>71.1</td>
<td>69.2</td>
</tr>
<tr>
<td>had problems paying rent or mortgage</td>
<td>yes</td>
<td>23.9</td>
<td>26.9</td>
</tr>
<tr>
<td></td>
<td>no</td>
<td>76.1</td>
<td>73.1</td>
</tr>
<tr>
<td>lost your house to foreclosure</td>
<td>yes</td>
<td>2.1</td>
<td>3.0</td>
</tr>
<tr>
<td></td>
<td>no</td>
<td>97.9</td>
<td>97.0</td>
</tr>
<tr>
<td>had to increase credit card debt to help pay the bills</td>
<td>yes</td>
<td>11.8</td>
<td>12.6</td>
</tr>
<tr>
<td></td>
<td>no</td>
<td>88.2</td>
<td>87.4</td>
</tr>
<tr>
<td>postponed getting married or having a baby</td>
<td>yes</td>
<td>9.4</td>
<td>10.3</td>
</tr>
<tr>
<td></td>
<td>no</td>
<td>90.6</td>
<td>89.7</td>
</tr>
<tr>
<td>moved to reduce housing expenses</td>
<td>yes</td>
<td>18.8</td>
<td>19.2</td>
</tr>
<tr>
<td></td>
<td>no</td>
<td>81.2</td>
<td>80.8</td>
</tr>
</tbody>
</table>

Note: No significant differences were detected between treatment and control group members.

---

8. CONCLUSIONS

Given the design of SEED OK and its focus on saving for education, it is useful to look at the amount of funds that would be available for a child’s education if saving behavior established in the demonstration continues until the child is aged 18. Exhibit 8-1 shows tuition (but not costs of room and board, fees, and textbooks) projections for

- **three types of savers**—low, average, and high (defined as OK SEED account holders who, respectively, received the state-owned account but made no additional deposits, accumulated the mean amount of savings, and were at the 95th percentile of accumulated savings);
- **two public, in-state schools**—Oklahoma City Community College and the University of Oklahoma; and
- **costs with and without financial aid** (namely, a Pell Grant, which provides needs-based funds to students for postsecondary education).

Note that we assume a steady rate of savings throughout the 10 years after SEED OK ends.84

In short, the projections do not suggest a consistently promising outcome unless the child expects to earn an associate’s degree from a local community college, which may be unlikely since most study members said they expected their child will graduate from college or continue beyond college. For those who attend community college, even low savers will see some benefit. To earn an associate’s degree without any financial aid, SEED will pay almost 13% of tuition costs; with a Pell Grant, SEED will pay for almost 22%. In contrast, at the University of Oklahoma, the SEED balance would cover from 2% to 4% of tuition for low- and mid-range savers. It would cover 6% of tuition for those at the 95th percentile of savers.

SEED for Oklahoma Kids is an ambitious initiative designed to test an ambitious idea: can a universal system of child development accounts be established and, if so, what impact do they have on children and families? The answer to the first part of the question is a resounding “yes.” SEED OK demonstrated that it is indeed possible to establish a universal system of child development accounts—in this instance, 529 plans opened for newborns whose mothers agreed to participate in a research study. This outcome was achieved through the diligent work and conscientious partnership between staff at the Center for

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84 At least two competing factors may affect the accuracy of this assumption. On the one hand, families may accelerate the rate of savings as the child ages, which would then underestimate the amount accumulated in the SEED account. On the other hand, some deposits may have been put into the SEED account only to earn matching funds and will subside, which would then overestimate the amount accumulated in the SEED account. Without more information about savings behavior over time, it seems reasonable to offer these projections based on the assumption that the rate of savings will continue as it did through the SEED OK initiative.
Exhibit 8-1. Estimated Costs of Tuition and Projections of SEED Savings

<table>
<thead>
<tr>
<th>SEED Financial Information</th>
<th>Low Saver ($1,000 contribution, no other deposits)</th>
<th>Average Saver (mean)</th>
<th>High Saver (95th percentile)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEED accumulation as of 12/11</td>
<td>$1,018</td>
<td>$1,255</td>
<td>$1,856</td>
</tr>
<tr>
<td>average annual deposit</td>
<td>0</td>
<td>$38</td>
<td>$90</td>
</tr>
<tr>
<td>SEED account balance at age 18</td>
<td>$1,540</td>
<td>$2,567</td>
<td>$4,391</td>
</tr>
</tbody>
</table>

**Oklahoma City Community College**

- associate’s degree (no financial aid): $12,177
- associate’s degree (with Pell grant): $7,137
- no financial aid: SEED covers 12.6% 21.1% 36.1%
- with Pell grant: SEED covers 21.6% 36.0% 61.5%

**University of Oklahoma**

- bachelor’s degree (no financial aid): $74,286
- bachelor’s degree (with Pell Grant): $69,246
- no financial aid: SEED covers 2.1% 3.5% 5.9%
- with Pell grant: SEED covers 2.2% 3.7% 6.3%

Note: Exhibit 8-1 assumes a 3% rate of return, which was the average 15-year constant maturity Treasury rate of return for 2011, the final year of the demonstration. The child is assumed to be 4 years old at the end of the demonstration period and to enter college at age 18.

Sources:
Savings projections are from [http://www.finaid.org/calculators/scripts/savingsgrowth.cgi](http://www.finaid.org/calculators/scripts/savingsgrowth.cgi). Cost projections are based on each school’s website and [http://www.finaid.org/calculators/costprojector.phtml](http://www.finaid.org/calculators/costprojector.phtml). Financial aid calculations were done for a married couple 44 years old at the time the focal child would go to college (the sample mean age of respondents when the child was 4 years old, plus 14 years of aging) with two children (the median), and $53,000 of earned income (roughly the sample mean), with $52,000 of assets (the mean), owning a home. The student was assumed to have zero earnings. The projections were from [http://www.finaid.org/calculators/finaidestimate.phtml](http://www.finaid.org/calculators/finaidestimate.phtml).

The answer to the second part of the question is more complicated. The SEED OK contribution to the 529 plan increased by $1,000 the amount of money designated for the focal child’s education. That may or may not ultimately be of consequence for SEED OK children or their families, but at this point there are very few measured differences.
In terms of spurring additional saving for the child’s education, SEED OK increased by 15% the number of families who have their own 529 plans for their children. While that is notable and significant, it is actually a relatively small proportion since all SEED OK treatment group members could have had their own 529 plans for their children at no cost to them. Put another way, 16% of treatment group families accepted an offer that said, in effect, “Here is $100 to open your own account;” 84% did not.

Some of the reason for not accepting this opportunity is undoubtedly due to the nature of the initiative and the research design, both of which introduced potential hassles that could be minimized if a national system of child development accounts were implemented. But that so many families declined a risk-free offer also demonstrates that if one goal of an effective universal system is to spur individual savings for college, more is necessary than opening accounts and mailing materials. As part of the design to test a universal model, SEED OK’s outreach to treatment group families consisted mostly of written materials, some portion of which was almost certainly ignored by the recipients—parents of young children who probably have limited time and interest to read documents about saving for their child’s future. The bump-up in account opening associated with the Oklahoma State Treasurer’s information campaign suggests that multimedia education and messages may be a better way to reach the audience.

Treatment group members who opened their own accounts are disproportionately from higher socioeconomic groups. Among those who opened their own accounts, half made contributions; the account balance for the remainder was due solely to the $100 SEED OK deposit. A handful who did not make contributions gave rational reasons when asked why: they found other uses for their money or other investments that were more lucrative or sensible for their particular situations. Many of those who did not make contributions also gave rational reasons: they did not have money to invest.

The average contribution ($1,449) that account holders made into their accounts is substantial, but was disproportionately the result of contributions made by families of higher socioeconomic status. The SEED treatment effects on balances in participant-owned accounts were unequally distributed across families: large balances in participant-owned accounts in SEED OK were overwhelmingly concentrated in higher socioeconomic families. The mean treatment effect on balances in participant-owned accounts was $120—put another way, those who were in the treatment group saved $120 more than those in the control group. But the mean treatment effect is 0 for the bottom 84% of families (ranked by the amount of saving), a small impact for the next 10%, and progressively larger impacts for the top 6% of savers. On the whole, SEED OK in many ways reinforces findings regarding saving behavior from the Michigan SEED initiative: namely, that in its current format SEED may widen the gap between the haves and have-nots. The $1,000 each treatment group member received for the focal child benefits all participating families;
encouragement to open their own accounts and deposit money benefits mostly families at the upper end of the socioeconomic spectrum.

In terms of psychosocial outcomes, the results also generally parallel findings on the impact of the Michigan SEED initiative. That study reported few effects on psychosocial or educational measures for caregivers of children with SEED accounts, except for parents’ attitudes towards college education. MI SEED had a positive impact on parents’ view of the importance of a college education; SEED OK did not. We did not find any statistically significant treatment effect on home educational resources such as computer, Internet, children’s books, or activities such as reading in either the group as a whole or in any racial/ethnic subgroup. Provision of a child development account had no effect on caregivers’ attitudes about parenting, and there is only very limited support for the hypothesis that having a SEED account impacts parents’ well-being.

Several reasons could account for the fact that the SEED accounts had little impact on psychosocial outcomes. Focal children are young, about 4 years old.\textsuperscript{85} College is a long way off and saving for college may just not be a priority for their parents at this stage of their lives. The young age of the focal children means that any SEED impact on educational performance cannot yet be measured or may not be detectable until the child is older. It may also be that the amount of the SEED incentive is too small to make a statistically significant difference in light of the high cost of attending college, which is the expectation most parents have for their children.

The assets literature often cites research to support the statement, “The poor can save.” That finding flows from a lengthy history in the United States of saving among low-income families who know that financial resources will gain them access to better neighborhoods, educational opportunities, home purchases, and a nest egg to cover emergencies. SEED OK adds to the knowledge base that, yes, the poor can indeed save, but incentives and encouragement are not enough to enable saving across the spectrum of low-income families.

We wonder if the nature of the savings instrument—in this case, a 529 account— influences the relatively little impact measured in SEED OK. Making contributions into a 529 plan requires a degree of attachment to the financial system, such as direct deposits from payroll or the ability to write and mail a check. The most financially disadvantaged may not have this attachment, thereby limiting their ability to use a 529 account to save for their children’s education. A 529 plan is not without cost, including fees from the plan administrator, and risk, owing to variable investment returns. Moreover, in several respects, the 529 account does not act as a liquid asset for the family: it cannot be accessed for

\textsuperscript{85} MI SEED children were older at the time of the follow-up survey, which may help explain differences in outcomes between the two studies.
general use, it benefits only a single individual in the family, and it does not count when calculating a family's ability to get a mortgage or car loan.

We believe the most important part of the SEED OK story is yet to come. As SEED OK children age, it will be interesting to measure factors such as attachment to the educational system and their own expectations about their future education.
Appendix A

Baseline Survey Instrument
Note: The attached baseline survey is based on work conducted by Sondra Beverly and Deborah Adams, School of Social Welfare, University of Kansas; Trina Williams Shanks, University of Michigan; Michael Sherraden and Margaret Clancy, Center for Social Development, Washington University; and Ellen Marks, Bryan Rhodes, and Kevin Townsend, RTI International.

Saving for Education, Entrepreneurship, and Downpayment (SEED) is a national policy, practice and research initiative to explore the efficacy of long-term savings and investment accounts for all American children. The SEED initiative is organized and administered by CFED. SEED research is planned and conducted by the Center for Social Development at Washington University, the School of Social Welfare at the University of Kansas and RTI International.
A. **Introduction**

May I speak to [INSERT NAME FROM PRELOAD]?

* {ONCE R IS ON PHONE} My name is ______, and I’m calling for the Oklahoma Treasurer’s Office. I hope you remember receiving a letter inviting you to participate in a research study, and I am calling today to follow up.

If you agree to participate, I will ask questions about different topics, such as your household composition, employment, assets and debts, and expectations for your child’s future. Once you have completed the interview you will be paid $40 for your time. Your child will also have a 50-50 chance of receiving a $1,000 gift into the Oklahoma Savings Plan for College [PAUSE].

There are a few more things you should know. First, your decision to participate and any answers you give will not affect any benefits or services you receive from the Oklahoma Treasurer’s Office. Second, you will not have to answer any questions you don’t want to, and you will be free to end the interview at any time. Third, your data will be kept confidential so your name will not be associated with the research findings from this study.

Although your participation is completely voluntary, your responses are very important. Your opinions and experiences will help plan programs to benefit children in your community.

- A1. Are you willing to participate in this study?

**INTERVIEWER PROMPT:** IF RESPONDENT DOES NOT RECALL LETTER OR SEEMS UNFAMILIAR WITH STUDY, READ SCRIPT

1. YES
2. NO, WANT TO CONFIRM
3. WANT TO THINK ABOUT IT
4. NOT AVAILABLE NOW
9. REFUSED
• A2. \{IF A1 = 9\} Could you please tell me why you do not wish to participate in the study?

  1. NOT INTERESTED
  2. DON’T PARTICIPATE IN ANY SURVEYS
  3. DON’T HAVE THE TIME
  4. INCONVENIENT NOW
  5. OPPOSED TO INTRUSIVENESS INTO MY PRIVACY
  6. OTHER (SPECIFY: _____________)
  98. (VOL) DON’T KNOW
  99. (VOL) REFUSED

INTERVIEWER: IF REFUSED, GO TO REFUSAL CONVERSION PROTOCOL

• A3. \{IF A1 = 2, 3, 4 OR IF A2 = 3, 4\} When would be a good time for me to call back?

  DATE: _/_/__ TIME: _:_ AM/PM

Thanks. We will call back then.
B. Family Composition

- B1. Before we go any further, let me verify that you are [FILL CHILD NAME]’s parent. Is that correct?

1. YES
2. LEGAL GUARDIAN
3. NO → ASK TO SPEAK TO [FILL PARENT]
8. DK
9. REF

B1b. And does [FILL CHILD NAME] live with you at least half the time?

1. YES
2. NO → ASK FOR CONTACT INFORMATION FOR THE ADULT CHILD LIVES WITH AT LEAST HALF TIME, THEN TERMINATE
8. DK
9. REF

- B2. I’d like to begin by asking you some questions about you and your family. Are you currently...

  (NSAF 1999)

1. Married,
2. Widowed,
3. Divorced,
4. Separated, or
5. Never married?
8. DK
9. REF

B3. I’d like to ask about everyone in your household. Let’s start with you. I have your first name as [FILL NAME]. Is that correct? [IF NOT, CHANGE] And what is your age?

  (FACES Spring 1999 Parent Interview – slightly modified)

And who else lives with you at least half the time? What is his or her first name? Age? And relationship to [FILL CHILD]?

And relationship to you?

INTERVIEWER: COMPLETE GRID. ASK GENDER IF AT ALL UNCERTAIN

PROMPT: Anyone else?
<table>
<thead>
<tr>
<th>FIRST NAME</th>
<th>AGE</th>
<th>RELATIONSHIP TO CHILD</th>
<th>RELATIONSHIP TO R</th>
<th>GENDER (M/F)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. [FILL RESPONDENT]</td>
<td>[FILL FROM LIST]</td>
<td>n/a</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B. [FILL CHILD NAME]</td>
<td>[FILL FROM BIRTH CERT]</td>
<td>n/a</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

INTERVIEWER: CHOOSE RELATIONSHIPS FROM FOLLOWING LIST

1. PARENT
2. SPOUSE
3. PARTNER
4. GRANDPARENT
5. GREAT GRANDPARENT
6. SIBLING (STEP, FOSTER)
7. CHILD (STEP, FOSTER)
8. GRANDCHILD
9. AUNT, UNCLE
10. COUSIN
11. OTHER RELATIVE, IN-LAW
12. OTHER: ____________________
98. DK
99. REF
- **B4. {IF R IS PARENT AND FEMALE} Are you [FILL CHILD]’s …**
  1. Birth mother
  2. Adoptive mother
  3. Stepmother,
  4. Foster mother, or
  5. Guardian?
  8. DK
  9. REF

- **B5. {IF R IS PARENT AND MALE} Are you [FILL CHILD]’s …**
  1. Birth father
  2. Adoptive father
  3. Stepfather,
  4. Foster father, or
  5. Guardian?
  8. DK
  9. REF
D. **Demographics**

And now, a few more questions about your background.

- D1. {IF NO PRELOAD} What is the highest grade or year of school you have completed?

  (ECLS for 2yo)

  **INTERVIEWER: SELECT ONLY ONE RESPONSE**

<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>NO FORMAL SCHOOLING</td>
</tr>
<tr>
<td>7</td>
<td>7TH GRADE OR LESS</td>
</tr>
<tr>
<td>8</td>
<td>8TH GRADE</td>
</tr>
<tr>
<td>9</td>
<td>9TH GRADE</td>
</tr>
<tr>
<td>10</td>
<td>10TH GRADE</td>
</tr>
<tr>
<td>11</td>
<td>11TH GRADE</td>
</tr>
<tr>
<td>12</td>
<td>12TH GRADE BUT NO DIPLOMA</td>
</tr>
<tr>
<td>13</td>
<td>HIGH SCHOOL DIPLOMA</td>
</tr>
<tr>
<td>14</td>
<td>GED OR EQUIVALENT</td>
</tr>
<tr>
<td>15</td>
<td>VOC/TECH PROGRAM AFTER HIGH SCHOOL BUT NO VOC/TECH DIPLOMA</td>
</tr>
<tr>
<td>16</td>
<td>VOC/TECH DIPLOMA AFTER HIGH SCHOOL</td>
</tr>
<tr>
<td>17</td>
<td>SOME COLLEGE BUT NO DEGREE</td>
</tr>
<tr>
<td>18</td>
<td>ASSOCIATE’S DEGREE</td>
</tr>
<tr>
<td>19</td>
<td>BACHELOR’S DEGREE, GRADUATE FROM 4-YEAR COLLEGE OR UNIVERSITY</td>
</tr>
<tr>
<td>20</td>
<td>GRADUATE OR PROFESSIONAL SCHOOL BUT NO DEGREE</td>
</tr>
<tr>
<td>21</td>
<td>MASTER’S DEGREE (MA, MS)</td>
</tr>
<tr>
<td>22</td>
<td>DOCTORATE DEGREE (PHD, EDD)</td>
</tr>
<tr>
<td>23</td>
<td>PROFESSIONAL DEGREE AFTER BACHELOR’S DEGREE (MD, DDS, JD, ETC.)</td>
</tr>
<tr>
<td>98</td>
<td>DK</td>
</tr>
<tr>
<td>99</td>
<td>REF</td>
</tr>
</tbody>
</table>
D2. {IF R HAS A SPOUSE OR PARTNER} What is the highest grade or year of school your [FILL spouse/partner] has completed?

INTERVIEWER: SELECT ONLY ONE RESPONSE

0    NO FORMAL SCHOOLING
7    7TH GRADE OR LESS
8    8TH GRADE
9    9TH GRADE
10   10TH GRADE
11   11TH GRADE
12   12TH GRADE BUT NO DIPLOMA
13   HIGH SCHOOL DIPLOMA
14   GED OR EQUIVALENT
15   VOC/TECH PROGRAM AFTER HIGH SCHOOL BUT NO VOC/TECH DIPLOMA
16   VOC/TECH DIPLOMA AFTER HIGH SCHOOL
17   SOME COLLEGE BUT NO DEGREE
18   ASSOCIATE’S DEGREE
19   BACHELOR’S DEGREE, GRADUATE FROM 4-YEAR COLLEGE OR UNIVERSITY
20   GRADUATE OR PROFESSIONAL SCHOOL BUT NO DEGREE
21   MASTER’S DEGREE (MA, MS)
22   DOCTORATE DEGREE (PHD, EDD)
23   PROFESSIONAL DEGREE AFTER BACHELOR’S DEGREE (MD, DDS, JD, ETC.)
98   DK
99   REF

D3. {IF NO PRELOAD or B1 =2} Are you of Hispanic or Latino origin?

(ECLS-K 1999)

1    YES
2    NO
8    DK
9    REF

D4. {IF NO PRELOAD or B1 = 2} What is your race?

INTERVIEWER NOTE: SELECT ALL THAT APPLY. PROMPT BY READING CATEGORIES IF NECESSARY

(2000 Census, categories have been simplified)

1    WHITE
2    BLACK, AFRICAN AMERICAN
3    AMERICAN INDIAN OR ALASKA NATIVE
4    ASIAN, PACIFIC ISLANDER, HAWAIIAN NATIVE
5    OTHER (Specify: _________________________________)
98   DK
99   REF
• D5. (If no preload for mother and father) Is [fill child] of Hispanic or [fill Latina/Latino] origin?
  
  (ECLS-K 1999)

1. YES
2. NO
8. DK
9. REF

• D6. (If no preload for mother and father) What is [fill child]’s race?

  INTERVIEWER: SELECT ALL THAT APPLY. PROMPT BY READING CATEGORIES IF NECESSARY

1. WHITE
2. BLACK, AFRICAN AMERICAN
3. AMERICAN INDIAN OR ALASKA NATIVE
4. ASIAN, PACIFIC ISLANDER, HAWAIIAN NATIVE
5. OTHER (Specify: ____________________________)
8. DK
9. REF

• D7. Were you born in the United States?

  (National Survey on Drug Use and Health - NSDUH)

1. YES {go to D13}
2. NO
8. DK
9. REF

• D8. When did you come to live in the United States?

  (NSAF99)

  INTERVIEWER: CODE YEAR OR NUMBER OF YEARS AGO

  __________ SPECIFIC YEAR

  __________ # OF YEARS AGO

8998. DK
9999. REF

• D9. What country were you born in?

  (Modified ACS 2003)

  COUNTRY: ________________
D10. What language is spoken most in your home?

(Modified ECLSK PLQ.020)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ENGLISH</td>
</tr>
<tr>
<td>2</td>
<td>SPANISH</td>
</tr>
<tr>
<td>3</td>
<td>OTHER (Specify: ________________</td>
</tr>
<tr>
<td>8</td>
<td>DK</td>
</tr>
<tr>
<td>9</td>
<td>REF</td>
</tr>
</tbody>
</table>

D11. {IF D10 > 1} Is English also spoken in your home?

(ECLSK PLQ.020)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>YES</td>
</tr>
<tr>
<td>2</td>
<td>NO</td>
</tr>
<tr>
<td>8</td>
<td>DK</td>
</tr>
<tr>
<td>9</td>
<td>REF</td>
</tr>
</tbody>
</table>
DA. CHILD’S SSN

DA1 Intro. As you may recall, the Oklahoma Treasurer’s Office sent you a letter and said you will need to provide your child’s social security number to participate in this study. Joining the study means your child has a chance to get an Oklahoma College Savings Plan with a $1000 gift. The social security number will be held strictly confidential.

We will collect the number and send it to the Oklahoma State Treasurer’s Office. No one else will get your child’s social security number under any circumstances.

DA1. Would you please tell me [FILL CHILD]’s social security number?

(SEED research team)

SSN: ________________

9999999998 DK

9999999999 REF

INTERVIEWER: IF R DECLINES TO PROVIDE SSN, GO TO REFUSAL PROTOCOL

- DA1ver. {IF DA1 ≠ DK or RF} I have recorded your child’s social security number as [FILL DA1]. Is this correct?

(SEED research team)

1 YES

2 NO (RETURN TO DA1 AND CORRECT CHILD’S SSN)

8 DK

9 REF

- DA2. {IF DA1 = DK OR REF AND REFUSAL CONVERSION HAS NOT BEEN SUCCESSFUL} Unfortunately, you are not eligible for the study. This means your child will not have a 50-50 chance of receiving a $1,000 gift deposited into an Oklahoma College Savings Plan account and you will not be paid for completing the telephone interview.

- Would you please tell me why you prefer not to provide your child’s social security number?

(SEED research team)

1 RESPONDENT IS WILLING TO PROVIDE CHILD’S SSN (RETURN TO DA1 AND RECORD CHILD’S SSN)

2 RESPONDENT GIVES REASONS (SPECIFY)

DA2end. {IF DA2 = 2} Thank you for your time.
E. Housing

- E1. Now I have some questions about your housing arrangements and things in your home.

  What is your current housing situation? Do you:

  *(modified ECLS2)*

  INTERVIEWER: IF HOUSE IS OWNED IN SPOUSE’S OR PARTNER’S NAME, CODE AS OWN. IF RESPONSE IS “SECTION 8,” MARK AS “RENT.”

  1  Own  ➔ (GO TO E3)
  2  Rent, or  ➔ (GO TO E6)
  3  Have some other arrangement?
  8  DK
  9  REF

- E2. {IF E1 ≥ 3} What is your current arrangement?

  *(modified ECLS2)*

  INTERVIEWER NOTE: DON’T READ LIST. SELECT ONLY ONE RESPONSE

  PROMPT: Who do you live with? Do you help with expenses?

  1  LIVE WITH FRIENDS OR RELATIVES AND PAY PART OF HOUSING EXPENSES
  2  LIVE WITH FRIENDS OR RELATIVES BUT DO NOT PAY FOR HOUSING
  3  LIVE IN TEMPORARY HOUSING OR A SHELTER
  4  EXCHANGE SERVICES FOR HOUSING
  5  DO NOT PAY FOR HOUSING AS PART OF A JOB (E.G., MILITARY, CLERGY)
  6  HAVE ANOTHER TYPE OF HOUSING ARRANGEMENT? (Specify: ____________________)
  8  DK
  9  REF

- E3. {IF E1 = 1} Could you tell me what the value of your home is? About how much would it bring if you sold it today?

  *(ECLS2, except added prompt)*

  PROMPT: For this question, we are not concerned about whether or not you have a mortgage. We’d just like to know what your house would sell for.

  $ __________ VALUE OF HOME (GO TO E5)

  99999998   DK
  99999999   REF
E4. {IF E3 = DK OR REF} I’m going to read a list of housing values. Stop me when I’ve read the number your house is worth. If you don’t know the exact number, tell me your best guess:

1  Less than $25,000
2  Between $25,000 and $75,000
3  Between $75,000 and $150,000
4  More than $150,000
8  DK
9  REF

- E5. {IF E1 = 1} Do you have a mortgage on this property?

  (ECLS2)

  1  YES
  2  NO
  8  DK
  9  REF

E6. {IF E1 = 2 or 3} Do you live in public housing?

  (Modified ECLS2 question)

  1  YES
  2  NO
  8  DK
  9  REF

E6a. {IF E1 = 2 or 3 AND E6 ≠ 1} Do you receive any rent subsidy, like Section 8, from the government?

  (Modified ECLS2 question)

  1  YES
  2  NO
  8  DK
  9  REF

- E7. How many times, if any, have you moved in the past 12 months?

  (FACES97, except added “if any”)

  _________ NUMBER OF TIMES (IF NONE, ENTER 0)

  98  DK
  99  REF
E8. {IF E7 ≥1} In the past 12 months, did you move in with other people even for a little while because you could not afford to pay your mortgage, rent, or other bills?

(Modified FACES99)

1 YES
2 NO
8 DK
9 REF

E10. How many bedrooms are there in your home?

(NSAF 2002)

_________ NUMBER OF BEDROOMS

98 DK
99 REF

E11. Do you have a computer in your home?

(SEED Michigan Impact Evaluation)

1 YES
2 NO
8 DK
9 REF

E12. Do you have internet service in your home?

(SEED Michigan Impact Evaluation)

1 YES
2 NO
8 DK
9 REF

E13. How many children’s books do you have in your home, including books for children older than [FILL CHILD]?

(modified SEED Michigan Impact Evaluation)

1 None
2 1-10
3 11-25
4 More than 25
8 DK
9 REF
F. Health and Insurance

The next few questions are about your health and insurance.

- F1. In general, would you say your health is ...
  - (FACES)
    - 1 Excellent,
    - 2 Very good,
    - 3 Good,
    - 4 Fair, or
    - 5 Poor?
    - 8 DK
    - 9 REF

- F2. Are you currently covered by health insurance?
  - INTERVIEWER: THIS INCLUDES HEALTH INSURANCE PROVIDED THROUGH AN EMPLOYER, PURCHASED DIRECTLY FROM AN INSURANCE COMPANY, OR GOVERNMENT PROGRAMS LIKE MILITARY HEALTH CARE AND MEDICAID.
  - (FACES)
    - 1 YES
    - 2 NO
    - 8 DK
    - 9 REF

- F3. Are you currently covered by life insurance?
  - (SEED Michigan Impact Evaluation)
    - 1 YES
    - 2 NO
    - 8 DK
    - 9 REF
F4. Now I’m going to ask some questions about [FILL CHILD]’s health and insurance. In general, would you say [FILL CHILD]’s health is ...

(PSID A34; FACES99)

1   Excellent,
2   Very good,
3   Good,
4   Fair, or
5   Poor?
8   DK
9   REF

F5. Since [FILL CHILD] was born, has [FILL he/she] always been covered by health insurance?

INTERVIEWER: THIS INCLUDES HEALTH INSURANCE PROVIDED THROUGH AN EMPLOYER, PURCHASED DIRECTLY FROM AN INSURANCE COMPANY, OR GOVERNMENT PROGRAMS LIKE MILITARY HEALTH CARE AND MEDICAID.

(SIPP)

1   YES
2   NO
8   DK
9   REF

F6. {IF F5 = 2} Is [FILL CHILD] currently covered by any health insurance?

(FACES, modified for child)

1   YES
2   NO
8   DK
9   REF

F7. Since [FILL CHILD] was born, has [FILL he/she] seen a medical professional for well-child care, such as a check-up?

PROMPT: A medical professional is a doctor, nurse practitioner, physician assistant or midwife.

(NSAF 1997 slightly modified)

1   YES
2   NO
8   DK
9   REF
• F8. {IF F7 = 1} Where does [FILL CHILD] usually go for routine medical care like check-ups? Does [FILL he/she] go to a private doctor’s office, a clinic, the emergency room, or someplace else?

  INTERVIEWER: READ PROMPT ONLY IF RESPONDENT HESITATES OR SUGGESTS CHILD DOESN’T GO TO ONLY ONE PLACE

  PROMPT: Does [FILL CHILD] generally go to more than one place for routine medical care?

  (Modified ECLS for 2yo)

  1  A PRIVATE DOCTOR, PRIVATE CLINIC, OR HMO
  2  AN OUTPATIENT CLINIC RUN BY A HOSPITAL
  3  THE EMERGENCY ROOM AT A HOSPITAL
  4  PUBLIC HEALTH DEPARTMENT OR COMMUNITY HEALTH CENTER
  5  A MIGRANT HEALTH CLINIC
  6  THE INDIAN HEALTH SERVICE
  7  NATUROPATH OR HOLISTIC PRACTITIONER
  8  SOMEPLACE ELSE (SPECIFY: __________________________)?
  9  DOESN’T GO TO ONE PLACE MOST OFTEN
  98  DK
  99  REF

• F9. We would like to know a little about your child care arrangements. In particular, who watched [FILL CHILD] during the day yesterday?

  (modified SEED Michigan Impact Evaluation)

  1  RESPONDENT
  2  RESPONDENT’S SPOUSE/PARTNER
  3  OTHER RELATIVE (SPECIFY ________________________)
  4  FAMILY DAY CARE PROVIDER OR AT CHILD CARE CENTER
  5  OTHER (SPECIFY ________________________)
  8  DK
  9  REF
H. Attitudes about Parenting

- Next, I’d like to ask you some questions about parenting and care giving.

Please tell me whether you strongly agree, agree, disagree, or strongly disagree with each of the following statements.

(programmer note: RANDOMIZE QUESTION ORDER FOR H1-H4)

H1. I am happy with my role as a parent. Do you …

(Modified from the Parental Stress Scale from Berry and Jones, 1995)

1 Strongly agree
2 Agree
3 Disagree, or
4 Strongly disagree?
8 DK
9 REF

- H2. In my role as a parent, I often find that I have too little time for myself. Do you …

(Modified from Abidin 1980 and Morrison et al, 1998)

1 Strongly agree
2 Agree
3 Disagree, or
4 Strongly disagree?
8 DK
9 REF

- H3. As a parent, I enjoy the time I spend with my [FILL child/children].

(Modified from the Parental Stress Scale from Berry and Jones, 1995)

1 Strongly agree
2 Agree
3 Disagree, or
4 Strongly disagree?
8 DK
9 REF
• H4. I feel overwhelmed with the responsibilities of being a parent.

  *(Modified from Abidin 1980 and Morrison et al, 1998)*

  1. Strongly agree
  2. Agree
  3. Disagree, or
  4. Strongly disagree?
  8. DK
  9. REF

• H5. Now I’d like to ask you some questions about [FILL CHILD]’s education in the future.

  How far in school do you think that [FILL CHILD] will go?


  1. Won’t finish high school,
  2. Will graduate from high school,
  3. Will go to vocational, trade or business school,
  4. Will go to college, or
  5. Will go to graduate school?
  8. DK
  9. REF

• H6. How likely is it your family will find a way to work out the costs of college for [FILL CHILD]?

  *(SEED research team)*

  1. Very likely
  2. Somewhat likely
  3. Somewhat unlikely
  4. Very unlikely
  8. DK
  9. REF

• H7. How important is it that [FILL CHILD] goes to college? Would you say…

  *(SEED research team)*

  1. very important,
  2. pretty important,
  3. important,
  4. a little important, or
  5. not important
  8. DK
  9. REF
I. **Social Support**

- I1. Next I have a few questions about interaction with family, friends, and others.

  In the past 4 weeks, how often did you visit or talk with close **relatives** who don’t live with you? This would include visits, phone calls, letters, or e-mail messages.

  *(Adapted from DAS and Ceballo & McLoyd (2002))*

  1. Daily or almost daily
  2. A few times a week
  3. About once a week
  4. Less than once a week, or
  5. Not at all
  8. DK
  9. REF

- I2. In the past 4 weeks, how often did you visit or talk with close **friends**?

  INTERVIEWER: READ PROMPT ONLY IF NECESSARY

  PROMPT: This would include visits, phone calls, letters, or e-mail messages.

  *(Adapted from DAS and Ceballo & McLoyd (2002))*

  1. Daily or almost daily
  2. A few times a week
  3. About once a week
  4. Less than once a week, or
  5. Not at all
  8. DK
  9. REF

- I3. If you needed to find someone outside your household to take care of your [FILL child/children] for several hours, would that be…?

  *(SEED Michigan Impact Evaluation)*

  1. Very easy,
  2. Somewhat easy,
  3. Somewhat hard, or
  4. Very hard?
  8. DK
  9. REF
I4. If you needed to find someone to run errands if everyone in your house was sick in bed, would that be...?

(Idea from Ceballo & McLoyd (2002) but modified language)

1 Very easy,
2 Somewhat easy,
3 Somewhat hard, or
4 Very hard?
8 DK
9 REF
J. **Caregiver’s Mental Health**

Now 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 I read, please tell me how often you have felt this way.

*(Modified: 8 item version of CES-D, taken from AHEAD)*

<table>
<thead>
<tr>
<th></th>
<th>None of the time</th>
<th>Some of the time</th>
<th>Most of the time</th>
<th>All of the time</th>
<th>DK</th>
<th>REF</th>
</tr>
</thead>
<tbody>
<tr>
<td>J1.</td>
<td>I felt depressed. In the past 30 days, would you say you have felt this way.</td>
<td>☐ ☐ ☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐ ☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>J2.</td>
<td>I felt lonely. In the past 30 days, would you say you have felt this way.</td>
<td>☐ ☐ ☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐ ☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>J3.</td>
<td>I had crying spells. In the past 30 days, would you say you have felt this way.</td>
<td>☐ ☐ ☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐ ☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>J4.</td>
<td>I felt sad. In the past 30 days, would you say you have felt this way.</td>
<td>☐ ☐ ☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐ ☐</td>
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</tr>
</tbody>
</table>
L. Money Management and Saving Behavior

L1. Next I’m going to ask you some questions about how you manage money.

Suppose you had some extra money, say $200. What would you probably do with that money?

(Slightly revised ADD)

1. Spend all of it,
2. Spend most of it,
3. Save most of it, or
4. Save all of it?
8. DK
9. REF

L1a. {if L1 = 1 or 2} What would you spend it on?

(RECORD VERBATIM RESPONSE: _________________________)

L1b. About how much do you think you should have saved for emergencies and other unexpected things that may come up?

(SCF)

$ ____________ AMOUNT SAVED (IF NONE, ENTER 0)

9999998 DK
9999999 REF

L2. For each of the following statements, please tell me if it’s often, sometimes, or rarely true for your family.

INTERVIEWER NOTE: IF RESPONDENTS ASK HOW TO DEFINE THEIR FAMILIES, ASK THEM TO THINK ABOUT THEIR FAMILY IN THE WAY THAT IS MOST MEANINGFUL TO THEM

My family sets financial goals for our future. Is that …

(Slightly revised ADD)

1. Often,
2. Sometimes, or
3. Rarely true?
8. DK
9. REF
• L3. My family sticks to the financial plans we set for ourselves. Is that …

(Immediately revised ADD)

1 Often,
2 Sometimes, or
3 Rarely true for you?
8 DK
9 REF

• L4. I keep track of my spending. Is that …

(SEED Michigan Impact Evaluation)

1 Often,
2 Sometimes, or
3 Rarely true for you?
8 DK
9 REF

• L5. Friends or relatives expect me to help them out when I have extra money. Is that …

(Immediately revised ADD)

1 Often,
2 Sometimes, or
3 Rarely true for you?
8 DK
9 REF

• L6. I am hesitant to spend money that I have saved. Is that…

(Immediately revised ADD)

1 Often,
2 Sometimes, or
3 Rarely true for you?
8 DK
9 REF
Please tell me whether or not you agree with the following statements about finances.

<table>
<thead>
<tr>
<th>L7.</th>
<th>In general, I trust banks. Do you agree or disagree? <em>(Slightly revised ADD)</em></th>
<th>Agree</th>
<th>Disagree</th>
<th>DK</th>
<th>RF</th>
</tr>
</thead>
<tbody>
<tr>
<td>L8.</td>
<td>I trust my bank <em>(SEED research team)</em></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>L9.</td>
<td>It is important for my family to have a savings account. Agree or disagree? <em>(SEED Michigan Impact Evaluation)</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>L10.</td>
<td>My parents had a savings account while I was growing up <em>(modified SEED Michigan Impact Evaluation)</em></td>
<td></td>
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</tr>
<tr>
<td>L11.</td>
<td>It is important for a child to have a savings account while growing up <em>(SEED Michigan Impact Evaluation)</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>L12.</td>
<td>While I was growing up, my parents talked to me about how to manage money <em>(Consumer Credit Survey)</em></td>
<td></td>
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</tr>
</tbody>
</table>
M. Economic Pressure

I have a few questions about your family’s financial situation. Please remember that your answers are completely confidential.

Please tell me whether you strongly agree, agree, disagree, or strongly disagree with each of the following statements about your family’s financial situation.

(programmer note: RANDOMIZE QUESTION ORDER FOR M1-M5; HAVE RESPONSES APPEAR IN FIRST, SECOND, AND FOURTH ITEMS)


<table>
<thead>
<tr>
<th></th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>DK</th>
<th>REF</th>
</tr>
</thead>
<tbody>
<tr>
<td>M1. My family has enough money to afford the kind of home we need. Do you strongly agree, agree, disagree, or strongly disagree?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M2. My family has enough money to afford the kind of clothing we need. Do you strongly agree, agree, disagree, or strongly disagree?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M3. My family has enough money to afford the kind of furniture or household equipment we need.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M4. My family has enough money to afford the kind of food we need.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M5. My family has enough money to afford the kind of medical care we need.</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
• M6. During the past 12 months, did your family ...

(USDA Food Sufficiency single item)

- 1 Always have enough to eat,
- 2 Sometimes not have enough to eat, or
- 3 Often not have enough to eat?
- 8 DK
- 9 REF

• M7. In the last 12 months, did your family ever get emergency food from a church, a food pantry, or food bank?

(NHANES)

- 1 YES
- 2 NO
- 8 DK
- 9 REF

• M8. During the past 12 months, has your family’s financial situation...

(ADD)

- 1 Gotten better,
- 2 Gotten worse, or
- 3 Stayed the same?
- 8 DK
- 9 REF

• M9. How hopeful would you say your family’s financial situation looks? Would you say...

(ADD)

- 1 Very hopeful,
- 2 Somewhat hopeful,
- 3 Not very hopeful, or
- 4 Not at all hopeful?
- 8 DK
- 9 REF
P. Financial Knowledge

- P1. We’d like to learn what parents know about some financial matters. You may not know the answers to these next few questions. If you don’t, you can give your best guess or say you don’t know.

  - Do you think that the following statement is true or false: Buying a single company stock usually provides a safer return than a stock mutual fund?

    (2004 Health and Retirement Study)

    - 1 True
    - 2 False

- P2. {INTERVIEWER: READ SLOWLY}

  - Suppose you had $100 in a savings account and the interest rate was 2% per year. After 5 years, how much do you think you would have in the account if you left the money to grow… more than $102, exactly $102 or less than $102?

  Would you like me to repeat the question again?

  (IF YES, READ ENTIRE QUESTION AGAIN SLOWLY. IF NO, CODE RESPONSE)

  (2004 Health and Retirement Study)

  - 1 MORE THAN $102
  - 2 EXACTLY $102
  - 3 LESS THAN $102

- P3. {INTERVIEWER: READ SLOWLY}

  - Imagine that the interest rate on a savings account is 1% per year and inflation is 2% per year. After 1 year, would you be able to buy more than, exactly the same as, or less than today with the money in this account?

  Would you like me to repeat the question again?

  (IF YES, READ ENTIRE QUESTION AGAIN SLOWLY. IF NO, CODE RESPONSE)

  (2004 Health and Retirement Study)

  - 1 MORE THAN TODAY
  - 2 EXACTLY THE SAME AS TODAY
  - 3 LESS THAN TODAY
P4. Next I want to ask some questions about the way you manage your finances. How have you learned about managing your finances?

(Programmer: Randomize items in P4)

(modified SEED Michigan Impact Evaluation)

a. Have you learned about managing your finances through a high school or college course?
   1   YES
   2   NO
   8   DK
   9   REF

b. by taking other classes or seminars?
   1   YES
   2   NO
   8   DK
   9   REF

c. by reading magazines, newspapers and books?
   1   YES
   2   NO
   8   DK
   9   REF

d. Have you learned about managing your finances in talking with friends and family?
   1   YES
   2   NO
   8   DK
   9   REF

e. from shows on radio or television?
   1   YES
   2   NO
   8   DK
   9   REF

f. from the Internet?
   1   YES
   2   NO
   8   DK
   9   REF

g. Have you learned about managing your finances through experience at work?
   1   YES
   2   NO
   8   DK
   9   REF
h. through personal experience?
   1 YES
   2 NO
   8 DK
   9 REF

- P5. {if P4b = 1} Please tell me if you have ever taken classes or seminars in …

(SEED Michigan Impact Evaluation)

a. basic budgeting?
   1 YES
   2 NO
   8 DK
   9 REF

b. basic banking?
   1 YES
   2 NO
   8 DK
   9 REF

c. basic banking strategies?
   1 YES
   2 NO
   8 DK
   9 REF

d. credit, loans, or credit repair?
   1 YES
   2 NO
   8 DK
   9 REF

e. buying a home?
   1 YES
   2 NO
   8 DK
   9 REF

f. starting a business?
   1 YES
   2 NO
   8 DK
   9 REF

g. basic investment strategies?
   1 YES
   2 NO
   8 DK
   9 REF
h. saving for retirement?
   1 YES
   2 NO
   8 DK
   9 REF

i. saving for college?
   1 YES
   2 NO
   8 DK
   9 REF
C. Employment

Next, I have some questions about your employment status.

- **C1.** During the past week, did you work at a job or business for pay?

  INTERVIEWER NOTE: IF RESPONDENT IS SELF-EMPLOYED, CODE AS YES. IF RESPONDENT IS RETIRED OR UNABLE TO WORK, CODE AS NO.

  *(ECLS for 2 yo Section RI)*

  1   YES  
  2   NO  
  8   DK  
  9   REF  

- **C2.** {if C1 = 2} Were you on leave or vacation from a job or business?

  *(ECLS for 2 yo Section RI)*

  1   YES  
  2   NO  
  8   DK  
  9   REF  

  {go to C6}

- **C3.** {if C1 = 1} Considering all the jobs you may have, about how many hours per week on average do you work for pay?

  INTERVIEWER: IF HOURS VARY, ASK FOR AVERAGE NUMBER OF HOURS PER WEEK

  *(ECLS for 2 yo Section RI)*

  ________ HOURS WORKED

  98   DK  
  99   REF  

C4. For the next set of questions, please think about the job where you currently work the most hours.

What is your job title? For example, typist, teacher, retail clerk.

(ECLS for 2 yo Section RI but examples differ)

_______________________ JOB TITLE

DK

REF

C4a. Is this job in the military?

1  YES
2  NO
8  DK
9  REF

C5. Suppose you were to lose this job and needed to find another job. Would finding another one that paid about the same be:

(Idea from DAS, modified language)

1  Very easy,
2  Somewhat easy,
3  Somewhat hard, or
4  Very hard for you to do?
8  DK
9  REF

{LOOP THROUGH C6 – 10 FOR EACH MEMBER OF THE HOUSEHOLD OVER 18 INDICATED IN B3}

C6. During the past week, did your [FILL RELATION TO RESPONDENT, FIRST NAME] work for pay?

(ECLS for 2 yo Section RI)

1  YES
2  NO
8  DK
9  REF

C7. {if C6 = 2} Was your [FILL RELATION TO RESPONDENT, FIRST NAME] on leave or vacation from a job or business?

(ECLS for 2 yo Section RI)

1  YES
2  NO
8  DK
9  REF

{go to N1}
C8. Considering all the jobs your [FILL RELATION TO RESPONDENT, FIRST NAME] may have, about how many hours per week on average does (he/she) work for pay?

INTERVIEWER: IF HOURS VARY, ASK FOR AVERAGE NUMBER OF HOURS PER WEEK

- (ECLS for 2 yo Section RI)

_________ HOURS WORKED
98 DK
99 REF

C9. For the next set of questions, please think about the job where your [FILL RELATION TO RESPONDENT, FIRST NAME] currently works the most hours.

- What is your (his/her) job title? For example, typist, teacher, retail clerk.

- (ECLS for 2 yo Section RI but examples differ)

_______________________ JOB TITLE
DK
REF

C9a. Is this job in the military?

1 YES
2 NO
8 DK
9 REF

C10. Suppose your [FILL RELATION TO RESPONDENT, FIRST NAME] were to lose this job and needed to find another job. Would finding another one that paid about the same be:

- (Idea from DAS, modified language)

1 Very easy,
2 Somewhat easy,
3 Somewhat hard, or
4 Very hard for (FILL him or her) to do?
8 DK
9 REF
N. Income

• N1. Now I have some questions about the different sources of income you have in your household.

  During the past 12 months, including yourself, how many adults contribute to your household income?

  \textit{(ECLS2, but with added 12 month reference period)}

  ________ NUMBER OF ADULTS

  8  DK
  9  REF

• N2. \{IF C1 = 1 FILL \textquote{I have recorded that you have received income from a job since [FILL DATE]. Is this correct?}\}, ELSE FILL \textquote{Since [FILL DATE], have you received any income from a job?} \}

  \textit{(Question from DAS, except changed \textquote{year} to \textquote{since \_\_\_\_}; Categories combined from ADD and FACES99 SECTION K)}

  1  YES
  2  NO

• N2a. \{IF N2 = YES\} I\’m going to ask about your wages. Is it easier for you to tell me how much you are paid by the hour, day, week, month, or year?

  INTERVIEWER NOTE: IF MORE THAN 1 JOB, ASK ABOUT JOB WHERE RESPONDENT CURRENTLY WORKS THE MOST NUMBER OF HOURS

  \textit{(Slightly modified item from SLAITS \textemdash Child Well-being and Welfare module)}

  1  Hourly,
  2  Daily,
  3  Weekly,
  4  Twice a month,
  5  Monthly,
  6  Annually, or
  7  Some other way? (Specify: ________________________ )
  8  DK
  9  REF

• N2b. \{IF N2 = YES\} What is your pay before taxes and deductions? That is, how much do you earn [FILL N2a] before taxes and other deductions?

  \textit{(Slightly modified item from SLAITS \textemdash Child Well-being and Welfare module)}

  $ ___________________ AMOUNT EARNED

  99999998  DK
  99999999  REF
Programmer: loop through N2c – N2e for each person over 18 in the household indicated in B3

N2c.  {IF N2 = YES} {{IF C6 = 1 FOR THIS HH MEMBER, FILL “I have recorded that your [FILL RELATION TO RESPONDENT, FIRST NAME]” has received income from a job since [FILL DATE]. Is this correct?”}, ELSE FILL “Since [FILL DATE], has your [FILL RELATION TO RESPONDENT, FIRST NAME]” or any other member of your household received any income from a job?”}

(Question from DAS, except changed “year” to “since ___”; Categories combined from ADD and FACES99 SECTION K)

- N2d.  {IF N2c = YES} I’m going to ask about (his/her) wages. Is it easier for you to tell me how much (he/she) are paid by the hour, day, week, month, or year?

  INTERVIEWER: IF MORE THAN 1 JOB, ASK ABOUT JOB WHERE SPOUSE/PARTNER CURRENTLY WORKS THE MOST NUMBER OF HOURS

(See N2a/b)

1  Hourly,
2  Daily,
3  Weekly,
4  Twice a month,
5  Monthly,
6  Annually, or
7  Some other way? (Specify: ______________________)
8  DK
9  REF

- N2e.  {IF N2c = YES} What is (his/her) pay before taxes and deductions? That is, how much does (he/she) earn [FILL N2d] before taxes and other deductions?

  (See N2a/b)

  $ ____________ AMOUNT EARNED

  99999998    DK
  99999999    REF

N3.  In the past 12 months, that is, since [FILL DATE], have you or any member of your household received any income from the following sources?

  INTERVIEWER: READ EACH QUESTION IN THE LIST BELOW
(Question from DAS; categories combined from ADD and FACES99 SECTION K)

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
<th>DK</th>
<th>REF</th>
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<tbody>
<tr>
<td>Since [FILL DATE], have you or any member of your household received any income from self-employment?</td>
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<td>N4. Since [FILL DATE], have you or any member of your household received any income from TANF, which is also called welfare?</td>
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<td>N5. From SSI or SSDI, which is also called disability?</td>
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<td>N6. From food stamps?</td>
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<td>N7. From Social Security Retirement or Survivor’s benefits?</td>
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<td>N8. Since [FILL DATE], have you or any member of your household received any income from other retirement income, including pensions?</td>
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<td>N9. From unemployment benefits?</td>
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<td>N10. From veteran’s benefits?</td>
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<td>N11. Since [FILL DATE], have you or any member of your household received any income from payments for providing foster care?</td>
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<td>N12. From alimony, maintenance, or child support payments?</td>
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<td>N13. From other money from a current or former spouse or partner who doesn’t live with you?</td>
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<tr>
<td>N14. Since [FILL DATE], have you or any member of your household received any income from money provided by friends or family?</td>
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<td>N15. From occasional work, like hairdressing, baby-sitting, repairs, yard work, or selling things that you make?</td>
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<td>N16. From investments?</td>
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<tr>
<td>N17. Since [FILL DATE], have you or any member of your household received any money from the Earned Income Tax Credit, or EITC?</td>
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<tr>
<td>N18. Since [FILL DATE], have you or any member of your household received any income from any other sources?</td>
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</table>

N18A. {IF N18 = 1} What kind of income is that? ____________
• N19. Did you file an Oklahoma state income tax return for 2006?

(modified NLSY79 1998 for state)

1 YES
2 NO
8 DK
9 REF

• N20. Did you file a federal income tax return for 2006?

(NLSY79 1998)

1 YES
2 NO
8 DK
9 REF

• N21. Thinking about all of the sources of income you have told me about, what was the total income before taxes for your household during the past 12 months?

PROMPT: Your best guess would be fine.

(from FACES99 SECTION K)

$ ____________________ TOTAL YEARLY INCOME (GO TO O1)

9999998 DK
9999999 REF

• N22. Would you say it was…

INTERVIEWER NOTE: READ LIST SLOWLY

1 Less than $5,000,
2 Between $5,000 and $10,000,
3 Between $10,000 and $15,000,
4 Between $15,000 and $20,000,
5 $20,000 to $25,000?
6 $25,000 to $30,000,
7 Between $30,000 and $35,000,
8 $35,000 to $40,000,
9 $40,000 to $50,000,
10 Between $50,000 and $75,000,
11 $75,000 to $100,000
12 $100,000 to $125,000,
13 $125,000 to $150,000, or
14 More than $150,000?
98 DK
99 REF
O. Assets

- O1. Now I have some questions about various assets you may have.

  First, how many vehicles are owned by people who currently live in your household? Please be sure to include motorcycles, mopeds and RVs.

  *(NHTS 2001)*

  _______ NUMBER OF VEHICLES (IF 0, GO TO O3)

  8     DK
  9     REF

- O2. {IF O1 = 1} What is the year of that vehicle?

  {IF O1 > 1} What is the year of the newest vehicle?

  *(SEED research team)*

  __________ YEAR OF VEHICLE

  9998  DK
  9999  REF

  O2a  {IF O1>=1} What make? _______________

  O2b. {IF O1>=1} What model? _____________

Programmer: determine whether more than one adult in the household based on answers to B3. Anyone > age 18 = adult.

- *(Response ranges for the amount in each asset (O3a-O3g2) based on the Survey of Consumer Finances and the UNC Renters survey as outlined Flicker and Athey, “Definition of Ranges: SEED for Oklahoma Assets and Debts Questions”)*
• O3a. Do you [FILL IF MORE THAN ONE ADULT IN THE HH AS INDICATED IN B3 or any adults in your household] have a checking account?

(modified from ADD)

1  YES
2  NO
8  DK
9  REF

O3a1. {if O3a = YES} How much do you [FILL IF MORE THAN ONE ADULT IN THE HH or any adults in your household] have in total in checking accounts, is it…

1  less than $250;
2  more than $250, but less than $500;
3  more than $500, but less than $1,000;
4  more than $1,000, but less than $2,000;
5  more than $2,000, but less than $10,000;
6  or more than $10,000.
8  DK
9  RF

• O3b. Do you [FILL IF MORE THAN ONE ADULT IN THE HH or any adults in your household] have a savings account?

(modified from ADD)

1  YES
2  NO
8  DK
9  REF

O3b1. {if O3b = YES} How much do you [FILL IF MORE THAN ONE ADULT IN THE HH or any adults in your household] have in total in savings accounts, is it…

1  less than $250;
2  more than $250, but less than $500;
3  more than $500, but less than $1,000;
4  more than $1,000, but less than $3,000;
5  more than $3,000, but less than $50,000;
6  more than $50,000, but less than $100,000;
7  or more than $100,000.
8  DK
9  RF

{Programmer: Randomize O3c – O3g2 by logical two question chunks}
• O3c. Do you [FILL IF MORE THAN ONE ADULT IN THE HH or any adults in your household] have any certificates of deposit, treasury bills, or corporate bonds?

(modified from ADD)

1 YES
2 NO
8 DK
9 REF

• O3c1. {if O3c = YES} How much do you [FILL IF MORE THAN ONE ADULT IN THE HH or any adults in your household] have in total in certificates of deposit, treasury bills, or corporate bonds is it…

1 less than $1,000;
2 more than $1,000, but less than $2,000;
3 more than $2,000, but less than $5,000;
4 more than $5,000, but less than $10,000;
5 more than $10,000, but less than $20,000;
6 more than $20,000, but less than $50,000;
7 or more than $50,000.
8 DK
9 RF

• O3c2. Do you [FILL IF MORE THAN ONE ADULT IN THE HH or any adults in your household] have any savings bonds?

(modified from ADD)

1 YES
2 NO
8 DK
9 REF

• O3c3. {if O3c2 = YES} How much do you [FILL IF MORE THAN ONE ADULT IN THE HH or any adults in your household] have in total in savings bonds?

1 less than $250;
2 more than $250, but less than $500;
3 more than $500, but less than $1,000;
4 more than $1,000, but less than $5,000;
5 more than $5,000, but less than $10,000;
6 or more than $10,000.
8 DK
9 RF
• O3d. Do you [FILL IF MORE THAN ONE ADULT IN THE HH or any adults in your household] have any retirement accounts, such as IRAs or 401 (k)s?

(modified from ADD)

1 YES
2 NO
8 DK
9 REF

• O3d1. {if O3d = YES} How much do you [FILL IF MORE THAN ONE ADULT IN THE HH or any adults in your household] have in total in retirement accounts, such as IRAs or 401(k)s?

1 less than $3,000;
2 more than $3,000, but less than $5,000;
3 more than $5,000, but less than $10,000;
4 more than $10,000, but less than $25,000;
5 more than $25,000, but less than $50,000;
6 more than $50,000, but less than $100,000;
7 more than $100,000, but less than $200,000;
8 more than $200,000.
88 DK
99 RF

• O3e. Do you [FILL IF MORE THAN ONE ADULT IN THE HH or any adults in your household] have any other stocks or mutual funds?

(modified from ADD)

1 YES
2 NO
8 DK
9 REF

O3e1. {if O3e = YES} How much do you [FILL IF MORE THAN ONE ADULT IN THE HH or any adults in your household] have in total in other stocks or mutual funds?

1 less than $1,000;
2 more than $1,000, but less than $5,000;
3 more than $5,000, but less than $10,000;
4 more than $10,000, but less than $25,000;
5 more than $25,000, but less than $50,000;
6 more than $50,000, but less than $100,000;
7 or more than $100,000.
8 DK
9 RF
• O3f. Do you [FILL IF MORE THAN ONE ADULT IN THE HH or any adults in your household] have any savings at home or with trusted friend or family members?

(modified from ADD)

1 YES
2 NO
8 DK
9 REF

O3f1. {if O3f = YES} How much do you [FILL IF MORE THAN ONE ADULT IN THE HH or any adults in your household] have in total savings at home or with trusted friend or family members?

1 less than $500;
2 more than $500 but less than $1,000;
3 more than $1,000, but less than $5,000;
4 more than $5,000, but less than $10,000;
5 more than $10,000, but less than $25,000;
6 more than $25,000, but less than $50,000;
7 or more than $50,000.
8 DK
9 RF

• O3g. Do you [FILL IF MORE THAN ONE ADULT IN THE HH or any adults in your household] have any other types of savings?

(modified from ADD)

1 YES
2 NO
8 DK
9 REF

• O3g1. What kind of savings is this? __________________________

88 DK
99 RF

• O3g2. {if O3g = YES} How much do you [FILL IF MORE THAN ONE ADULT IN THE HH or any adults in your household] have in total in other types of savings?

1 less than $1,000;
2 more than $1,000, but less than $5,000;
3 more than $5,000, but less than $10,000;
4 more than $10,000, but less than $25,000;
5 more than $25,000, but less than $50,000;
6 more than $50,000, but less than $75,000;
7 or more than $75,000.
8 DK
9 RF
O4. {IF O3b = YES} Where did you get most of the money that you put into your savings account?

(SEED research team)

1. JOB EARNINGS/INCOME
2. RETIREMENT ACCOUNT FROM EMPLOYER MATCHING
3. INHERITANCE
4. GIFT
5. TAX REFUND OR EITC
6. INSURANCE SETTLEMENT/PAYMENT
7. INVESTMENT INCOME
8. OTHER (specify ____________________________)
98. DK
99. REF

O5. {IF O3b = YES} Why are you [FILL or your spouse/partner] saving?

INTERVIEWER: DON’T READ LIST. SELECT ALL THAT APPLY

PROMPT: Any other reasons?

(SEED research team but most response options from SCF)

1. ORDINARY LIVING EXPENSES/BILLS
2. IN CASE OF UNEMPLOYMENT OR ILLNESS, FOR EMERGENCIES
3. BUY A HOUSE
4. HOME IMPROVEMENTS/REPAIRS
5. BUY OR REPAIR CAR
6. HOLIDAYS/SPECIAL OCCASIONS
7. EDUCATION
8. “FOR THE CHILDREN/FAMILY”
9. TO START, BUY, OR INVEST IN A BUSINESS
10. RETIREMENT/OLD AGE/TO BUILD A “NEST EGG”
11. OTHER: ________________________
98. DK
99. REF

O6. {IF O3b = YES} Where do you [FILL or your spouse/partner] have savings?

(SEED Michigan Impact Evaluation)

INTERVIEWER: SELECT ALL THAT APPLY

1. In a savings account with a bank or credit union,
2. In another account with a bank or credit union,
3. In a pension plan or retirement account through work,
4. In some other investment product like stocks, bonds, a mutual fund, or an IRA
5. At home, or
6. Somewhere else? (Specify: ________________________________)
98. DK
99. REF
• O7. Do you try to save a regular amount each month?

(Slightly revised ADD)

1 YES
2 NO
8 DK
9 REF

• O8. {IF O7 = 1} About how much do you try to save each month?

(Slightly revised ADD)

$_______________ AMOUNT SAVED

9999998 DK
9999999 REF

O8a. {IF O3a OR O3b = 1}

• Do you [FILL IF MORE THAN ONE ADULT IN THE HH FROM B3 or any adults in your household] have money directly deposited into a checking or savings account?

• PROMPT: Direct deposit means that the money is automatically transferred.

(modified SEED Michigan Impact Evaluation survey)

1 YES
2 NO
8 DK
9 REF

• O9. Do you [FILL IF MORE THAN ONE ADULT IN THE HH or any adults in your household] have any business assets such as buildings, vehicles, equipment, or inventory?

(Modified from ADD)

1 YES
2 NO
8 DK
9 REF

O9a (if O9 = YES) How much do you think the total business assets are worth?

$_______________

8 DK
9 REF
O10. Do you [FILL IF MORE THAN ONE ADULT IN THE HH or any adults in your household] have any assets in the form of rental property, land, or other real estate you own?

(Modified from ADD)

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<tr>
<th></th>
<th>YES</th>
<th>NO</th>
<th>DK</th>
<th>REF</th>
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<tr>
<td>1</td>
<td>YES</td>
<td>NO</td>
<td>DK</td>
<td>REF</td>
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</table>

O10a. (if O10 = YES) How much do you think the property would sell for now?

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<th></th>
<th>DK</th>
<th>REF</th>
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<tbody>
<tr>
<td>8</td>
<td>DK</td>
<td>REF</td>
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</table>
OA. Savings for Children

- OA1. Now, I’m going to ask you some other questions about savings. Have you [FILL or your spouse/partner] or anyone else ever saved any money specifically for [FILL CHILD]?

  *(SEED Michigan Impact Evaluation)*

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<tr>
<td>1</td>
<td>YES</td>
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<tr>
<td>2</td>
<td>NO</td>
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<td>REF</td>
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- OA2. {IF OA1 = 1} Who has saved money specifically for [FILL CHILD]?
  
  - PROBE: Anyone else?
  
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<tbody>
<tr>
<td>1</td>
<td>RESPONDENT</td>
</tr>
<tr>
<td>2</td>
<td>OTHER PARENT</td>
</tr>
<tr>
<td>3</td>
<td>OTHER (INSERT VERBATIM RELATIONSHIPS) ____________________</td>
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<td>8</td>
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- OA3. {IF OA1 = 1} In total, about how much has been saved for [FILL CHILD]?

  *(SEED Michigan Impact Evaluation)*

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<tr>
<td>1</td>
<td>RESPONDENT KNOWS TOTAL AMOUNT</td>
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<tr>
<td>8</td>
<td>DK</td>
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<td>REF</td>
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  - OA3A. {IF OA3 = 1}

    $ ____________ AMOUNT SAVED

  - OA3B. {IF OA3 =2}

    $ ____________ KNOWN AMOUNT SAVED

    $ ____________ BEST GUESS OF ADDITIONAL SAVINGS

  999998 DK
  999999 REF
• OA4. {IF OA1 = 1} Have you [FILL or your spouse/partner] or anyone else opened a special account for [FILL CHILD]’s education known as a college savings plan or 529 account?

(SEED Research Team)

1 YES
2 NO
8 DK
9 REF

• OA4A. {IF OA4 = 1} Who opened these accounts for [FILL CHILD]?
  • PROBE: Anyone else?

(SEED Research Team)

1 RESPONDENT
2 OTHER PARENT
3 OTHER (INSERT VERBATIM RELATIONSHIPS) ______________________
8 DK
9 REF

• OA5. {IF OA4 = 1} In total, about how much is saved in [FILL CHILD]’s 529 account(s)?

(SEED Research Team)

• 1 RESPONDENT KNOWS TOTAL AMOUNT
  • 2 RESPONDENT KNOWS SPECIFIC AMOUNT IN ONE OR MORE ACCOUNTS, BUT NOT IN ALL ACCOUNTS
  • 8 DK
  • 9 REF

• OA5A. {IF OA5 = 1}

$ ___________ AMOUNT SAVED

OA5B. {IF OA5 =2}

$ ___________ KNOWN AMOUNT SAVED

$ ___________ BEST GUESS OF ADDITIONAL SAVINGS

999998 DK
999999 REF
• OA6. Have you [FILL or your spouse/partner] ever saved any money specifically for any other child’s education?

_(SEED research team)_

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<tr>
<td>1</td>
<td>YES</td>
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<tr>
<td>2</td>
<td>NO</td>
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<td>8</td>
<td>DK</td>
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OA7. {IF OA6 = 1} Please give me the first name of other children you [FILL or your spouse/partner] have saved for.

_{programmer: Create pop-up list of all children in the household based on the B3 roster}_

INTERVIEWER: confirm if a name given in OA7 is a child in the household. If not, ask:

*What is [FILL CHILD]’s relationship to you [FILL or your spouse/partner]?

_{programmer note: USE RELATIONSHIPS FROM ROSTER AND THE FOLLOWING LIST TO FILL GRID IN OA7}_

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<tr>
<td>1</td>
<td>RESPONDENT’S CHILD</td>
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<td>2</td>
<td>PARTNER’S CHILD</td>
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<td>3</td>
<td>OTHER RELATIVE (SPECIFY ____________)</td>
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<td>4</td>
<td>OTHER NON-RELATIVE</td>
<td></td>
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*And how much have you [FILL or your spouse/partner] saved for [FILL CHILD]’s education?*

<table>
<thead>
<tr>
<th>CHILD NAME {FILL FROM OA7}</th>
<th>RELATIONSHIP TO R/SPOUSE/PARTNER {FILL FROM B3 OR ENTER}</th>
<th>AMOUNT SAVED</th>
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OB. Debt

- Now we have a few questions about various bills and debts you may have.
- OB1. \(\text{IF } (E1 = 1 \text{ and } E5 = \text{Yes}) \text{ or } E1 = 2\) Last month, what was the amount of your \(\text{IF } E1 = 1, \text{ FILL } \text{“mortgage payment”}, \text{ IF } E1 = 2, \text{ FILL } \text{“rent”}\)?

\[
\text{(NSAF 1997 slightly modified)}
\]

\[______ \text{ AMOUNT OF PAYMENT}\]

\[999998 \text{ DK} \]
\[999999 \text{ REF}\]

- OB2. \(\text{IF } E1 = 1 \text{ OR } 2\) Does that amount include taxes or insurance?

\[
\text{(SEED Research Team)}
\]

1 YES
2 NO

- OB3. Do you have a major credit card, like Visa, MasterCard, Discover, or American Express?

PROMPT: A major credit card can be used at many different stores.

\[
\text{(OCC Survey of Financial Activities and Attitudes)}
\]

1 YES
2 NO
8 DK
9 REF

- OB4. \(\text{IF } OB3 = 1\) If you have more than one major credit card, please think about the one you use most often. Each month, do you pay off the entire balance:

\[
\text{(OCC Survey of Financial Activities and Attitudes)}
\]

1 Always or almost always,
2 Sometimes,
3 Or hardly ever?
4 OTHER (Specify: ____________________________)
5 NA, DON’T USE THE CARD
8 DK
9 REF
OB5. I’m going to ask you about some money you [FILL IF MORE THAN ONE ADULT IN THE HH or any adults in your household] may owe or bills you [FILL IF MORE THAN ONE ADULT IN THE HH or any adults in your household] may have.

{Programmer: Randomize OB5a – OB5l1 by logical two question chunks}

- (Response ranges for the amount in each asset (OB5a-OB5l1) based on the Survey of Consumer Finances and the UNC Renters survey as outlined in the white paper “Definition of Ranges: SEED for Oklahoma Assets and Debts Questions” by Flicker and Athey)

- OB5a. Do you [FILL IF MORE THAN ONE ADULT IN THE HH or any adults in your household] owe any money on credit cards?

(Modified from ADD)

1 YES
2 NO
8 DK
9 REF

OB5a1. {IF OB5a=YES} How much do you [FILL IF MORE THAN ONE ADULT IN THE HH or any adults in your household] owe in total on credit cards?

1 less than $500;
2 more than $500 but less than $1,000;
3 more than $1,000, but less than $2,000;
4 more than $2,000, but less than $10,000;
5 more than $10,000, but less than $20,000;
6 more than $20,000, but less than $50,000;
7 or more than $50,000.
8 DK
9 RF

- OB5b. Do you [FILL IF MORE THAN ONE ADULT IN THE HH or any adults in your household] owe any money on car loans or other vehicle loans?

(Modified from ADD)

1 YES
2 NO
8 DK
9 REF
• OB5b. {IF OB5b=YES} How much do you [FILL IF MORE THAN ONE ADULT IN THE HH or any adults in your household] owe in total on car loans or other vehicle loans?

1. less than $500;
2. more than $500 but less than $1,000;
3. more than $1,000, but less than $5,000;
4. more than $5,000, but less than $10,000;
5. more than $10,000, but less than $25,000;
6. more than $25,000, but less than $50,000;
7. or more than $50,000.
8. DK
9. RF

• OB5c. Do you [FILL IF MORE THAN ONE ADULT IN THE HH or any adults in your household] owe any money on personal loans from banks, credit unions, friends, or relatives?

(Modified from ADD)

1. YES
2. NO
8. DK
9. REF

• OB5c1. {IF OB5c=YES} How much do you [FILL IF MORE THAN ONE ADULT IN THE HH or any adults in your household] owe in total on personal loans from banks, credit unions, friends, or relatives?

1. less than $500;
2. more than $500 but less than $1,000;
3. more than $1,000, but less than $5,000;
4. more than $5,000, but less than $10,000;
5. more than $10,000, but less than $25,000;
6. more than $25,000, but less than $75,000;
7. or more than $75,000.
8. DK
9. RF

• OB5d. Do you [FILL IF MORE THAN ONE ADULT IN THE HH or any adults in your household] owe any money on home equity loans?

(Modified from ADD)

1. YES
2. NO
8. DK
9. REF
• OB5d1. {IF OB5d=YES} How much do you [FILL IF MORE THAN ONE ADULT IN THE HH or any adults in your household] owe in total on home equity loans?

1 less than $5000;
2 more than $5000 but less than $10,000;
3 more than $10,000, but less than $25,000;
4 more than $25,000, but less than $75,000;
5 or more than $75,000.
8 DK
9 RF

• OB5e. Do you [FILL IF MORE THAN ONE ADULT IN THE HH or any adults in your household] owe any money on medical bills?

(Modified from ADD)

1 YES
2 NO
8 DK
9 REF

• OB5e1. {IF OB5e=YES} How much do you [FILL IF MORE THAN ONE ADULT IN THE HH or any adults in your household] owe in total on medical bills?

1 less than $500;
2 more than $500 but less than $1,000;
3 more than $1,000, but less than $5,000;
4 more than $5,000, but less than $10,000;
5 more than $10,000, but less than $25,000;
6 more than $25,000, but less than $75,000;
7 or more than $75,000.
8 DK
9 RF

• OB5f. Do you [FILL IF MORE THAN ONE ADULT IN THE HH or any adults in your household] owe any money on business loans?

(Modified from ADD)

1 YES
2 NO
8 DK
9 REF
• OB5f1. {IF OB5f=YES} How much do you [FILL IF MORE THAN ONE ADULT IN THE HH or any adults in your household] owe in total on business loans?

1 less than $500;
2 more than $500 but less than $1,000;
3 more than $1,000, but less than $5,000;
4 more than $5,000, but less than $10,000;
5 more than $10,000, but less than $25,000;
6 more than $25,000, but less than $75,000;
7 or more than $75,000.
8 DK
9 RF

• OB5g. Do you [FILL IF MORE THAN ONE ADULT IN THE HH or any adults in your household] owe any money on installment loans for major items like furniture or appliances? (Modified from ADD)

1 YES
2 NO
8 DK
9 REF

• OB5g1. {IF OB5g=YES} How much do you [FILL IF MORE THAN ONE ADULT IN THE HH or any adults in your household] owe in total on installment loans for major items like furniture or appliances?

1 less than $500;
2 more than $500 but less than $1,000;
3 more than $1,000, but less than $5,000;
4 more than $5,000, but less than $10,000;
5 more than $10,000, but less than $25,000;
6 more than $25,000.
8 DK
9 RF

• OB5h. Do you [FILL IF MORE THAN ONE ADULT IN THE HH or any adults in your household] owe any money on student loans? (Modified from ADD)

1 YES
2 NO
8 DK
9 REF
• OB5h1. {IF OB5h=YES} How much do you [FILL IF MORE THAN ONE ADULT IN THE HH or any adults in your household] owe in total on student loans?

1 less than $500;
2 more than $500 but less than $1,000;
3 more than $1,000, but less than $5,000;
4 more than $5,000, but less than $10,000;
5 more than $10,000, but less than $25,000;
6 more than $25,000, but less than $75,000;
7 or more than $75,000.
8 DK
9 RF

• OB5i. Do you [FILL IF MORE THAN ONE ADULT IN THE HH or any adults in your household] owe any money on debt consolidation loans?

(Modified from ADD)

1 YES
2 NO
8 DK
9 REF

• OB5i1. {IF OB5i=YES} How much do you [FILL IF MORE THAN ONE ADULT IN THE HH or any adults in your household] owe in total on debt consolidation loans?

1 less than $500;
2 more than $500 but less than $1,000;
3 more than $1,000, but less than $5,000;
4 more than $5,000, but less than $10,000;
5 more than $10,000, but less than $25,000;
6 more than $25,000, but less than $75,000;
7 or more than $75,000.
8 DK
9 RF

• OB5j. Do you [FILL IF MORE THAN ONE ADULT IN THE HH or anyone else in your household] owe any money on property other than your home?

(Modified from ADD)

1 YES
2 NO
8 DK
9 REF
**OB5j.** {IF OB5j=YES} How much do you [FILL IF MORE THAN ONE ADULT IN THE HH or any adults in your household] owe in total on property other than your home?

1. less than $10,000;
2. more than $10,000 but less than $25,000;
3. more than $25,000 but less than $75,000;
4. more than $75,000 but less than $100,000;
5. more than $100,000 but less than $250,000;
6. or more than $250,000.
7. DK
8. RF

**OB5k.** Do you [FILL IF MORE THAN ONE ADULT IN THE HH or any adults in your household] owe any money on overdue bills?

(Modified from ADD)

1. YES
2. NO
8. DK
9. REF

**OB5k1.** {IF OB5k=YES} How much do you [FILL IF MORE THAN ONE ADULT IN THE HH or any adults in your household] owe in total on overdue bills?

1. less than $250;
2. more than $250 but less than $500;
3. more than $500, but less than $1,000;
4. more than $1,000, but less than $5,000;
5. more than $5,000, but less than $10,000;
6. more than $10,000, but less than $50,000;
7. or more than $50,000.
8. DK
9. RF

**OB5l.** Do you [FILL IF MORE THAN ONE ADULT IN THE HH or any adults in your household] owe any money on any other debt?

(Modified from ADD)

1. YES
2. NO
8. DK
9. REF
• OB5i1. {IF OB5i=YES} How much do you [FILL IF MORE THAN ONE ADULT IN THE HH or any adults in your household] owe in total on any other debt?

1. less than $250;
2. more than $250 but less than $500;
3. more than $500, but less than $1,000;
4. more than $1,000, but less than $5,000;
5. more than $5,000, but less than $10,000;
6. more than $10,000, but less than $50,000;
7. or more than $50,000.
8. DK
9. RF
Q. Follow-up and Wrap-up

- Q0a. We’d like to send a short follow-up questionnaire in the mail to find out more about your household finances. Could you please tell me the name of the person in your household who knows the most about your household’s finances?
  
  - FIRST NAME ____________
  - LAST NAME ____________

- Q0b. What is this person’s mailing address?
  
  - STREET ADDRESS _________________
  - APT NUMBER ____________
  - CITY ____________
  - STATE ____________
  - ZIP ____________

- Q0c. What is this person’s phone number?
  
  - PHONE ________________

- Q1. We’re now reaching the end of the interview. We will be contacting you again in about 6 months to update your address and phone number. I’d like to get some background information to help us locate you. Please remember that everything you tell me will be kept confidential.

  First, please tell me your full legal name, starting with first, middle, then last.

  INTERVIEWER NOTE: IF ANY DOUBT AT ALL, ASK R TO SPELL. IF NO MIDDLE NAME OR INITIAL, LEAVE BLANK

  FIRST  ________________
  MIDDLE ________________
  LAST  ________________

- Q2. {IF FEMALE AND MARRIED} What is your maiden name?

  ________________________________________________________

- Q3. Do you go by any other names or nicknames?

  1  YES
  2  NO
  8  DK
  9  REF
• Q4. {IF Q3 = 1} What are they?
  
  ALIAS #1: ____________________
  
  ALIAS #2: ____________________

• Q5. What is your birthday? The month, day, and year?
  
  ____________ Month
  
  ____________ Date
  
  ____________ Year

• Q6. Let me confirm your street address. I have it as…

  INTERVIEWER NOTE: VERIFY INFORMATION. CORRECT AS NEEDED

  STREET ADDRESS: ____________________
  
  CITY: ____________________
  
  STATE: ____________________
  
  ZIP: ____________________

• Q7. Do you expect to be living at this same address or at a different address 6 months from now?
  
  1  SAME ADDRESS
  2  DIFFERENT ADDRESS
  8  DK
  9  REF

• Q8. {IF Q7 = 2} Could I have that address if you have it?

  INTERVIEWER NOTE: IF R PLANS TO MOVE, COLLECT AS MUCH INFORMATION AS POSSIBLE ABOUT NEW LOCATION

  STREET ADDRESS: ____________________
  
  CITY: ____________________
  
  STATE: ____________________
  
  ZIP: ____________________

• Q9. Is there a better address we should use to contact you in the future?
  
  1  YES
  2  NO
  8  DK
  9  REF
Q10. {IF Q9 = 1} What is the best address for us to use in the future?

STREET ADDRESS: ________________
CITY: ______________________
STATE: ______________________
ZIP: ______________________

Q11. {IF Q10 = ANY ANSWER} Is that your address or the address of another person or place?

1 RESPONDENT’S ADDRESS
2 ADDRESS OF SOME OTHER PERSON/PLACE

Q12. {IF Q11 = 2} Whose address is it?

INTERVIEWER NOTE: ENTER NAME AND RELATIONSHIP TO RESPONDENT

NAME: ________________________________
RELATIONSHIP: ________________________________

Q13. Does [FILL CHILD] go by any other names or nicknames?

1 YES
2 NO
8 DK
9 REF

Q14. {IF Q13 = 1} What are they?

ALIAS #1: ________________
ALIAS #2: ________________

Q15. Do you think [FILL CHILD]’s name could change in the next 6 months?

1 YES
2 NO
8 DK
9 REF

Q16. {IF Q15 = 1} What do you think [FILL CHILD]’s name would be changed to?

PROMPT: Please tell me the first, middle and last name

FIRST NAME: ________________________________
MIDDLE NAME: ________________________________
LAST NAME: ________________________________
Q17. I have as your telephone number [FILL TELEPHONE]. Is this the best telephone phone number to reach you?

INTERVIEWER NOTE: ENTER R’S CURRENT HOME PHONE NUMBER OR THE NUMBER WHERE HE/SHE CAN BE REACHED MOST OFTEN

PHONE: (______) _______________

Q18. Is this your day or evening phone number?
1 DAY
2 EVENING
3 BOTH

Q19. Is this your home phone number, a work number, or some other number?
1 HOME NUMBER
2 WORK NUMBER
3 FRIEND/RELATIVE’S NUMBER
4 BEEPER/PAGER/CELL PHONE NUMBER
5 OTHER (Specify: ________________________________)

Q20. Is there another phone number, beeper, or pager number to use to reach you?
1 YES
2 NO

Q21. {IF Q20 = 1} What is that number?

INTERVIEWER NOTE: IF R HAS MORE THAN 1 ALTERNATIVE NUMBER, ENTER THE ONE HE/SHE CAN BE REACHED AT MOST OFTEN

PHONE: (______) _______________

Q22. {IF Q20 = 1} And is that your day or evening number?
1 DAY
2 EVENING
3 BOTH

Q23. {IF Q20 = 1} Is this your home phone number, a work number, or some other number?
1 HOME NUMBER
2 WORK NUMBER
3 FRIEND/RELATIVE’S NUMBER
4 BEEPER/PAGER/CELL PHONE NUMBER
5 OTHER (Specify: ________________________________)

A-61
• Q24. Do you have an email address? {IF YES} May I have it, please?

EMAIL ADDRESS (SPECIFY _________________)

NO
DK
REF

• Q25. We’d also like the names of three relatives or friends who do not live with you but would always know how to reach you if you moved.

Please give me the name, address, and telephone number of a relative or friend who would always know how to reach you if you moved? And what is that person’s relationship to you?

INTERVIEWER NOTE: VERIFY SPELLING. ENCOURAGE R TO PROVIDE ALL REQUESTED INFORMATION

CONTACT PERSON #1:

NAME: ________________________________

RELATIONSHIP: ________________________

STREET ADDRESS/P.O. BOX: _________________

CITY: ________________________________

STATE: ________________________________

ZIP: ________________________________

PHONE: ________________________________
• Q26. And the name, address and telephone number of another relative or friend who would always know how to reach you if you moved? And what is that person’s relationship to you?

INTERVIEWER NOTE: THIS INFORMATION IS VERY IMPORTANT! ENCOURAGE R TO PROVIDE ADDITIONAL CONTACT PERSON, VERIFY SPELLING, ENCOURAGE R TO PROVIDE ALL REQUESTED INFORMATION

CONTACT PERSON #2:

NAME: ________________________________
RELATIONSHIP: ________________________________
STREET ADDRESS/P.O. BOX: ________________________________
CITY: ________________________________
STATE: ________________________________
ZIP: ________________________________
PHONE: ________________________________

• Q27. And the name, address and telephone number of another relative or friend who would always know how to reach you if you moved? And what is that person’s relationship to you?

INTERVIEWER NOTE: THIS INFORMATION IS VERY IMPORTANT! ENCOURAGE R TO PROVIDE ADDITIONAL CONTACT PERSON, VERIFY SPELLING, ENCOURAGE R TO PROVIDE ALL REQUESTED INFORMATION

CONTACT PERSON #3:

NAME: ________________________________
RELATIONSHIP: ________________________________
STREET ADDRESS/P.O. BOX: ________________________________
CITY: ________________________________
STATE: ________________________________
ZIP: ________________________________
PHONE: ________________________________

• Q28. In the past three years, have you lived in any city other than [FILL CITY]?

1 YES
2 NO
• **Q29.**  {IF Q28 = 1} In what cities or towns did you live?

  INTERVIEWER NOTE: ENTER THREE MOST RECENT CITIES/TOWNS AND STATE FOR EACH

  CITY/TOWN: __________________________________________

  STATE: __________________________________________

• **Q30.**  {IF Q28 = 1} Any more? {IF NO, GO TO Q32}

  CITY/TOWN: __________________________________________

  STATE: __________________________________________

• **Q31.**  {IF Q28 = 1 and Q30 = YES} Any more? {IF NO, GO TO Q32}

  CITY/TOWN: __________________________________________

  STATE: __________________________________________

• **Q32.**  And the last question. What is your driver’s license number? Again, this will only be used to help us locate you if you move and we need to contact you again in the future.

  INTERVIEWER NOTE: PROMPT R TO GET NUMBER FROM DRIVER’S LICENSE, IF NEEDED

  LICENSE#: __________________________________________

  STATE: __________________________________________

  N/A, DOES NOT HAVE DRIVER’S LICENSE

• **Q33.**  Thank you very much for this information.

  That’s the end of the interview. I’d like to thank you for the time and information you’ve provided. We will soon send you $40 for participating in this interview. Your opinions and experiences will help plan programs to benefit children in your community.

  In about six months, we’ll be in touch to see if you have moved or if your phone number has changed. You’ll receive a letter and be asked to send back a postcard with contact information. After we receive that postcard, you’ll be sent $10.

  Again, many thanks.
List of all cited sources:

- NSAF (National Survey of America’s Families)
- FACES (Family and Child Experiences Survey)
- ECLS (Early Childhood Longitudinal Study)
- 2000 Census
- NSDUH (National Survey on Drug Use and Health)
- ACS (American Community Survey)
- PSID (Panel Study of Income Dynamics)
- Parental Stress Scale from Berry and Jones, 1995
- NSFH (National Survey of Families and Households)
- DAS (Dysfunctional Attitudes Scale) and Ceballo & McLoyd (2002)
- AHEAD (Asset and Health Dynamics)
- ADD (American Dream Demonstration)
- SCF (Survey of Consumer Finances)
- SIPP (Survey of Income and Program Participation)
- SLAITS (State and Local Area Integrated Telephone Survey)
- Consumer Credit Survey
- USDA Food Sufficiency
- NHANES (National Health and Nutrition Examination Survey)
- 2004 Health and Retirement Study
- SEED Michigan Impact Evaluation
- NHTS 2001 (National Household Travel Survey)
Appendix B

Follow-up Survey Instrument
SEED for Oklahoma Kids

First Follow-up Survey

March 2011

RTI International

The attached survey is based on work originally conducted for MI SEED, found at: http://rti.org/pubs/mi_seed_report.pdf. That instrument was developed by Sondra Beverly and Deborah Adams, School of Social Welfare, University of Kansas; Trina Williams Shanks, University of Michigan; Michael Sherraden and Margaret Clancy, Center for Social Development, Washington University; and Ellen Marks, Bryan Rhodes, and Kevin Townsend, RTI International.

 Saving for Education, Entrepreneurship, and Downpayment (SEED) is a national policy, practice and research initiative to explore the efficacy of long-term savings and investment accounts for all American children. SEED OK research is planned and conducted by the Center for Social Development at Washington University and RTI International.
**NOTES:**

**General Conventions:**

- **Preload** = information previously obtained from baseline survey or updates from sample maintenance activities.
- **Focal child** = the newborn selected for SEED OK.
- **Text in all caps is not read out loud.**
- **All questions have "don’t know” and “refused” response options by default.**
- **This instrument is for interviews conducted with baseline survey respondent (the mother of the focal child). If the focal child is no longer living with the baseline respondent RTI will use an instrument modified for administration to a new caregiver.**

**Unfolding Brackets:**

For all items collecting dollar amounts, the survey first asks for the amount (that is, a point estimate). If the respondent refuses to answer or does not know the amount, the survey uses “unfolding brackets,” which are a series of questions that reduce respondent burden and produce a range (e.g., between $500 and $1000, between $2000 and $5000) as an answer.

Each respondent has a randomly selected entry point into the brackets. The random entry point reduces the likelihood of social desirability (some respondents may infer that the first dollar amount they hear is the “right” answer) or satisficing (respondents accept the first answer so they can be done with the question and move on through the survey). For simplicity, throughout the survey where unfolding brackets are used the ranges specified for that question are provided, rather than the full question wording.
**Introduction**

May I speak to {INSERT NAME FROM PRELOAD}?

Before we go any further, let me verify that you are {CHILD}’s parent. Is that correct?

1. YES
2. LEGAL GUARDIAN
3. NO ➔ ASK TO SPEAK TO {FILL PARENT}

{ONCE R IS ON PHONE} My name is ______, and I’m calling from RTI International, a not-for-profit research firm. I hope you remember completing a telephone survey a few years ago and receiving a letter saying that we would call to conduct a follow-up survey. I’m calling to conduct the interview. This call may be monitored for quality control purposes.

If you agree to participate, I will ask questions about different topics, such as your household composition, employment, assets and debts, and expectations for your child’s future. The interview should take about 45 minutes, and once you have completed the interview **you will be paid $40.**

There are a few more things you should know. First, your decision to participate and any answers you give will not affect any benefits or services you receive from Oklahoma. Second, you will not have to answer any questions you don’t want to, and you will be free to end the interview at any time. Third, your data will be kept confidential so your name will not be associated with the research findings from this study.

Although your participation is completely voluntary, your responses are very important. Your opinions and experiences will help plan programs to benefit children in your community.

**INTRO1.** Are you willing to participate in this study?

**INTERVIEWER PROMPT: IF RESPONDENT DOES NOT RECALL LETTER OR SEEMS UNFAMILIAR WITH STUDY, READ SCRIPT**

1. YES
2. NO, WANT TO CONFIRM
3. WANT TO THINK ABOUT IT
4. NOT AVAILABLE NOW
9. REFUSED
INTRO2. {IF INTRO1 = 9} Could you please tell me why you do not wish to participate in the study?

1 NOT INTERESTED
2 DON'T PARTICIPATE IN ANY SURVEYS
3 DON'T HAVE THE TIME
4 INCONVENIENT NOW
5 OPPOSED TO INTRUSIVENESS INTO MY PRIVACY
6 OTHER (SPECIFY: ______________)

INTERVIEWER: IF REFUSED, GO TO REFUSAL CONVERSION PROTOCOL

INTRO3. {IF INTRO1 = 2, 3, 4 OR IF INTRO2 = 3, 4} When would be a good time for me to call back?

DATE: ___/___/___   TIME: ___:___ AM/PM

Thanks. We will call back then.
A. **Family Composition**

{PROGRAMMER: THROUGHOUT THE SURVEY \{CHILD\} = FILL WITH FOCAL CHILD’S FIRST NAME}

- A1a. Does \{CHILD\} live with you at least half the time?
  1. YES
  2. NO ➔ ASK FOR CONTACT INFORMATION FOR THE ADULT CHILD LIVES WITH AT LEAST HALF TIME, THEN GO TO ALTERNATE VERSION

- A2. I’d like to begin by asking you some questions about you and your family. Are you currently...
  1. Married,
  2. Widowed,
  3. Divorced,
  4. Separated, or
  5. Never married?

- A3. I’d like to ask about everyone in your household. Let’s start with you. I have your first name as \{FILL RESPONDENT’S NAME\}. Is that correct? \{IF NOT, CHANGE\} And what is your age?

  And who else lives with you at least half the time? What is his or her first name? Age? And relationship to \{CHILD\}? And relationship to you?

  INTERVIEWER: COMPLETE GRID. ASK GENDER IF AT ALL UNCERTAIN

<table>
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<tr>
<th>PROMPT: Anyone else?</th>
<th>FIRST NAME</th>
<th>AGE</th>
<th>RELATIONSHIP TO CHILD</th>
<th>RELATIONSHIP TO R</th>
<th>GENDER (M/F)</th>
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<td>{FILL FROM LIST}</td>
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<td>B. {FILL CHILD NAME}</td>
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<td>C.</td>
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<tr>
<td>Other: ______________________________</td>
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</tbody>
</table>
### B. Demographics

And now, a few more questions about your background.

- **B1.** What is the highest grade or year of school you have completed?
  
  **INTERVIEWER:** SELECT ONLY ONE RESPONSE
  
<table>
<thead>
<tr>
<th></th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>0</td>
<td>NO FORMAL SCHOOLING</td>
</tr>
<tr>
<td>7</td>
<td>7TH GRADE OR LESS</td>
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<td>8</td>
<td>8TH GRADE</td>
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<td>9</td>
<td>9TH GRADE</td>
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<td>10</td>
<td>10TH GRADE</td>
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<td>11</td>
<td>11TH GRADE</td>
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<tr>
<td>12</td>
<td>12TH GRADE BUT NO DIPLOMA</td>
</tr>
<tr>
<td>13</td>
<td>HIGH SCHOOL DIPLOMA</td>
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<tr>
<td>14</td>
<td>GED OR EQUIVALENT</td>
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<tr>
<td>15</td>
<td>VOC/TECH PROGRAM AFTER HIGH SCHOOL BUT NO VOC/TECH DIPLOMA</td>
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<tr>
<td>16</td>
<td>VOC/TECH DIPLOMA AFTER HIGH SCHOOL</td>
</tr>
<tr>
<td>17</td>
<td>SOME COLLEGE BUT NO DEGREE</td>
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<tr>
<td>18</td>
<td>ASSOCIATE’S DEGREE</td>
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<tr>
<td>19</td>
<td>BACHELOR’S DEGREE, GRADUATE FROM 4-YEAR COLLEGE OR UNIVERSITY</td>
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<tr>
<td>20</td>
<td>GRADUATE OR PROFESSIONAL SCHOOL BUT NO DEGREE</td>
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<tr>
<td>21</td>
<td>MASTER’S DEGREE (MA, MS)</td>
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<tr>
<td>22</td>
<td>DOCTORATE DEGREE (PHD, EDD)</td>
</tr>
<tr>
<td>23</td>
<td>PROFESSIONAL DEGREE AFTER BACHELOR’S DEGREE (MD, DDS, JD, ETC.)</td>
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</tbody>
</table>

- **B1a.** *(IF B1 ≥ 19)* What was your undergraduate major?
  
  ____________________________________________
B2. {IF R HAS A SPOUSE OR PARTNER} What is the highest grade or year of school your {FILL spouse/partner} has completed?

INTERVIEWER: SELECT ONLY ONE RESPONSE

0  NO FORMAL SCHOOLING
7  7TH GRADE OR LESS
8  8TH GRADE
9  9TH GRADE
10 10TH GRADE
11 11TH GRADE
12 12TH GRADE BUT NO DIPLOMA
13 HIGH SCHOOL DIPLOMA
14 GED OR EQUIVALENT
15 VOC/TECH PROGRAM AFTER HIGH SCHOOL BUT NO VOC/TECH DIPLOMA
16 VOC/TECH DIPLOMA AFTER HIGH SCHOOL
17 SOME COLLEGE BUT NO DEGREE
18 ASSOCIATE’S DEGREE
19 BACHELOR’S DEGREE, GRADUATE FROM 4-YEAR COLLEGE OR UNIVERSITY
20 GRADUATE OR PROFESSIONAL SCHOOL BUT NO DEGREE
21 MASTER’S DEGREE (MA, MS)
22 DOCTORATE DEGREE (PHD, EDD)
23 PROFESSIONAL DEGREE AFTER BACHELOR’S DEGREE (MD, DDS, JD, ETC.)

B2a. {IF B2≥19} What was {his/her} undergraduate major?

____________________________________________

{PROGRAMMER: PRELOAD ITEMS B3 – B8; SKIP ALL B3-B8 THAT HAVE PRELOAD INFORMATION}

B3. Are you of Hispanic or Latino origin?

1    YES
2    NO

B4. What is your race?

INTERVIEWER: SELECT ALL THAT APPLY. PROMPT BY READING CATEGORIES IF NECESSARY.

1    WHITE
2    BLACK, AFRICAN AMERICAN
3    AMERICAN INDIAN OR ALASKA NATIVE
4    ASIAN, PACIFIC ISLANDER, HAWAIIAN NATIVE
5    OTHER (SPECIFY: ________________________________ )
B5. Is {CHILD} of Hispanic or {FILL Latina/Latino} origin?

1  YES
2  NO

B6. Were you born in the United States?

1  YES
2  NO

B7. {IF B6=2} When did you come to live in the United States?

INTERVIEWER: CODE YEAR OR NUMBER OF YEARS AGO

__________ SPECIFIC YEAR

__________ # OF YEARS AGO

B8. What country were you born in?

COUNTRY: ______________

B9. What language is spoken most in your home?

1  ENGLISH
2  SPANISH
3  OTHER (Specify: ________________)

B10. {IF B9 > 1} Is English also spoken in your home?

1  YES
2  NO
C. Employment

Next, I have some questions about your employment status.

- C1. During the past week, did you work at a job or business for pay?

  INTERVIEWER: IF RESPONDENT IS SELF-EMPLOYED, CODE AS YES. IF RESPONDENT IS RETIRED OR UNABLE TO WORK, CODE AS NO.

  1 YES
  2 NO

- C2. {if C1 = 2} What was the main reason you did not work last week?

  1 RETIRED
  2 DISABLED
  3 FULL-TIME STUDENT
  4 HOMEMAKER OR STAY-AT-HOME PARENT
  5 UNEMPLOYED, LAID OFF, FURLoughed
  6 LOOKING FOR WORK
  7 VACATION OR ON LEAVE (SICK, MEDICAL, MATERNITY, ETC.)
  8 OTHER___________(SPECIFY)

- C3. {if C1 = 1} Considering all the jobs you have, about how many hours per week on average do you work for pay?

  INTERVIEWER: IF HOURS VARY, ASK FOR AVERAGE NUMBER OF HOURS PER WEEK

  __________ HOURS WORKED

- C3a. {if C3=DK or RF} Is it…

  1 35 hours per week or less
  2 More than 35 hours per week?

  {LOOP THROUGH C4-C6 FOR EACH MEMBER OF THE HOUSEHOLD OVER 18, DETERMINED FROM A3}

- C4. During the past week, did your {FILL RELATION TO RESPONDENT, FIRST NAME} work for pay?

  1 YES
  2 NO
• C5. {if C4 = 2} What was the main reason your {FILL RELATION TO RESPONDENT, FIRST NAME} did not work last week?
   1. RETIRED
   2. DISABLED
   3. FULL-TIME STUDENT
   4. HOMEMAKER OR STAY-AT-HOME PARENT
   5. UNEMPLOYED, LAID OFF, FURLOUGHED
   6. LOOKING FOR WORK
   7. VACATION OR ON LEAVE (SICK, MEDICAL, MATERNITY, ETC.)
   8. OTHER_____________(SPECIFY)

• C6. {IF C4=YES} Considering all the jobs your {FILL RELATION TO RESPONDENT, FIRST NAME} has, about how many hours per week on average does (he/she) work for pay?

   INTERVIEWER: IF HOURS VARY, ASK FOR AVERAGE NUMBER OF HOURS PER WEEK

   ________ HOURS WORKED

• C6a. {if C6= DK or RF} Is it…

   1. 35 hours per week or less
   2. More than 35 hours per week?
D. Housing and Real Estate

- D1. Now I have some questions about your housing arrangements.

  What is your current housing situation? Do you:

  INTERVIEWER: IF HOUSE IS OWNED IN SPOUSE’S OR PARTNER’S NAME, CODE AS OWN. IF RESPONSE IS “SECTION 8,” MARK AS “RENT.”

  1. Own
  2. Rent, or
  3. Have some other arrangement?

- D2. {IF D1 = 2} Do you currently live in a …

  1. Privately owned apartment or house,
  2. Public housing,
  3. Rent subsidized or Section 8 housing, or
  4. Some other type of housing (SPECIFY______________)

  PROMPT IF NECESSARY: In Section 8 housing, a person receives a rent subsidy or pays a lower rent because the government pays part of the cost.

- D3. {IF D1 = 3} What is your current arrangement?

  INTERVIEWER: SELECT ONE RESPONSE

  PROMPT: Who do you live with? Do you help with expenses?

  1. LIVE WITH FRIENDS OR RELATIVES AND PAY SOME HOUSING EXPENSES
  2. LIVE WITH FRIENDS OR RELATIVES BUT DO NOT PAY FOR HOUSING
  3. LIVE IN TEMPORARY HOUSING OR A SHELTER
  4. EXCHANGE SERVICES FOR HOUSING
  5. DO NOT PAY FOR HOUSING AS PART OF A JOB SUCH AS MILITARY, CLERGY
  6. INHERITING HOUSE, ESTATE IN PROCESS
  7. HAVE ANOTHER TYPE OF HOUSING ARRANGEMENT? (SPECIFY: _______)

B-11
• D4. How many times, if any, have you moved in the past 12 months?
  __________ NUMBER OF TIMES (IF NONE, ENTER 0)

• D5. {IF D4 ≥1} In the past 12 months, did you move in with other people even for a little while because you could not afford to pay your mortgage, rent, or other bills?
  1 YES
  2 NO

• D6. {IF D1=1} Could you tell me what the value of your home is? About how much would it bring if you sold it today?

  PROMPT: For this question, we are not concerned about whether or not you have a mortgage. We’d just like to know what your house would sell for.
  $ ____________ AMOUNT

  {UNFOLDING BRACKETS for DK/RF:
  Under $25,000
  $25,000 - $75,000
  $75,000-$150,000
  More than $150,000}

• D7. {IF D1=1} Do you have a mortgage, second mortgage, a home equity line of credit, or any other loan that uses this property as collateral?
  1 YES
  2 NO

• D8. {IF D7=1} Overall, how much do you owe on this property?

  $ ____________ AMOUNT

  {unfolding brackets for DK/RF:
  Under $25,000
  $25,000 - $75,000
  $75,000-$150,000
  More than $150,000}
E.  Health and Insurance

The next few questions are about your health and insurance.

- E1. In general, would you say your health is ...  
   1   Excellent,  
   2   Very good,  
   3   Good,  
   4   Fair, or  
   5   Poor?

- E2. Are you currently covered by health insurance?  
   INTERVIEWER: THIS INCLUDES INSURANCE PROVIDED THROUGH AN EMPLOYER, PURCHASED DIRECTLY FROM AN INSURANCE COMPANY, OR PROVIDED THROUGH A GOVERNMENT PROGRAM LIKE SOONERCARE, MEDICAID, MEDICARE, OR MILITARY HEALTH CARE.  
   1   YES  
   2   NO

- E3. In 2010 did you ever have health insurance through an Oklahoma plan called SoonerCare or your state’s Medicaid program?  
   1   YES  
   2   NO

- E4. Now I’m going to ask some questions about {CHILD}’s health and insurance.  
   In general, would you say {CHILD}’s health is ...  
   1   Excellent,  
   2   Very good,  
   3   Good,  
   4   Fair, or  
   5   Poor?

- E5. Since {CHILD} was born, has {FILL he/she} always been covered by health insurance?  
   1   YES  
   2   NO
• E6. {IF E5 = 2} Is {CHILD} currently covered by any health insurance?

INTERVIEWER: THIS INCLUDES INSURANCE PROVIDED THROUGH AN EMPLOYER, PURCHASED DIRECTLY FROM AN INSURANCE COMPANY, OR PROVIDED THROUGH A GOVERNMENT PROGRAM LIKE SOONERCARE, MEDICAID, MEDICARE, OR MILITARY HEALTH CARE.

1 YES
2 NO

• E7. In the past year, has {FILL CHILD} seen a medical professional for well-child care, such as a check-up?

PROMPT: A medical professional is a doctor, nurse practitioner, physician assistant, or midwife.

1 YES
2 NO

• E8. {IF E7 = 1} Where does {CHILD} usually go for routine medical care like check-ups? Does {FILL he/she} go to a private doctor’s office, a clinic, the emergency room, or someplace else?

INTERVIEWER: READ PROMPT ONLY IF RESPONDENT HESITATES OR SUGGESTS CHILD DOESN’T GO TO ONLY ONE PLACE

PROMPT: Does {CHILD} generally go to more than one place for routine medical care?

1 A PRIVATE DOCTOR, PRIVATE CLINIC, OR HMO
2 AN OUTPATIENT CLINIC RUN BY A HOSPITAL
3 THE EMERGENCY ROOM AT A HOSPITAL
4 PUBLIC HEALTH DEPARTMENT OR COMMUNITY HEALTH CENTER
5 A MIGRANT HEALTH CLINIC
6 THE INDIAN HEALTH SERVICE
7 NATUROPATH OR HOLISTIC PRACTITIONER
8 SOMEPLACE ELSE (SPECIFY: __________________________)?
9 DOESN’T GO TO ONE PLACE MOST OFTEN
F. Child Schooling, Environment, and Development

FINTRO. Next, I have some questions about {CHILD}.

- F1. Does {CHILD} attend a pre-school or pre-K program?

  INTERVIEWER: PRE-SCHOOL OR PRE-K IS DIFFERENT FROM DAY CARE PROGRAMS IN THAT IT INCLUDES AN EDUCATIONAL COMPONENT.

  1. YES
  2. NO

- F2. {IF F1=YES} What kind of school does {CHILD} attend? Is it a…

  1. Head Start program
  2. Public school, or
  3. Private school
  4. HOME SCHOOLED
  5. SOME OTHER KIND OF SCHOOL

- F3. {IF F1=NO, DK or RF} We would like to know a little about your child care arrangements. In particular, who watched {CHILD} during the day yesterday?

  1. RESPONDENT
  2. RESPONDENT’S SPOUSE/PARTNER
  3. OTHER RELATIVE (SPECIFY _____________________)
  4. FAMILY DAY CARE PROVIDER OR AT CHILD CARE CENTER
  5. OTHER (SPECIFY _______________________

- F4. Do you have a computer in your home?

  1. YES
  2. NO

- F5. Do you have internet service in your home?

  1. YES
  2. NO

- F6. How many children’s books do you have in your home, including books for children other than {CHILD}?

  1. None
  2. 1-5
  3. 6-10
  4. More than 10
• F7. During the past week, on how many days did you read to {CHILD}? Was it...
   1 no days,
   2 one to two days
   3 three to five days, or
   4 six or seven days?

• F8. How high is {CHILD} able to count?
   1 Not at all
   2 Up to five
   3 Up to 10
   4 Up to 20
   5 Up to 50 or
   6 Up to 100 or more?

• F9. Can {CHILD} identify the colors red, yellow, blue and green? Can {CHILD} identify…
   1 All of them,
   2 Some of them, or
   3 None of them by name?

• F10. Can {CHILD} recognize…
   1 All the letters of the alphabet,
   2 Most of them,
   3 Some of them, or
   4 None of them?
G. Optimism (Life Orientation Test) and Depression (CES-D)

GINTRO. Now I’d like to ask you some questions about your feelings. Answer according to your own feelings, rather than how you think “most people” would answer. Please tell me if you agree, disagree, or neither agree nor disagree with the following statements.

- G1. In uncertain times, I usually expect the best. Do you …
  1. Agree
  2. Neither agree nor disagree
  3. Disagree

- G2. If something can go wrong for me, it will. Do you …
  1. Agree
  2. Neither agree nor disagree
  3. Disagree

- G3. I’m always optimistic about my future.
  1. AGREE
  2. NEITHER AGREE NOR DISAGREE
  3. DISAGREE

- G4. I hardly ever expect things to go my way.
  1. AGREE
  2. NEITHER AGREE NOR DISAGREE
  3. DISAGREE

- G5. I rarely count on good things happening to me. Do you …
  1. Agree
  2. Neither agree nor disagree
  3. Disagree

- G6. Overall, I expect more good things to happen to me than bad.
  1. AGREE
  2. NEITHER AGREE NOR DISAGREE
  3. DISAGREE
G7INTRO. Now 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 I read, please tell me how often you have felt this way.

<table>
<thead>
<tr>
<th>None of the time</th>
<th>Some of the time</th>
<th>Most of the time</th>
<th>All of the time</th>
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</table>

G7. I felt depressed. In the past 30 days, would you say you have felt this way

G8. I felt lonely. In the past 30 days, would you say you have felt this way

G9. I had crying spells. In the past 30 days, how often did this happen

G10. I felt sad. In the past 30 days, would you say you have felt this way
H. Child’s Future

H1INTRO. Next, I’d like to ask you some questions about parenting and care giving.

Please tell me whether you strongly agree, agree, disagree, or strongly disagree with each of the following statements.

{PROGRAMMER: RANDOMIZE QUESTION ORDER FOR H1-H4}

• H1. I am happy with my role as a parent. Do you …
  1. Strongly agree
  2. Agree
  3. Disagree, or
  4. Strongly disagree?

• H2. In my role as a parent, I often find that I have too little time for myself. Do you …
  1. Strongly agree
  2. Agree
  3. Disagree, or
  4. Strongly disagree?

• H3. As a parent, I enjoy the time I spend with my [FILL child/children].
  1. Strongly agree
  2. Agree
  3. Disagree, or
  4. Strongly disagree?

• H4. I feel overwhelmed with the responsibilities of being a parent.
  1. Strongly agree
  2. Agree
  3. Disagree, or
  4. Strongly disagree?

• H5INTRO. Now I am going to read some statements and ask you to tell me how often each occurred in the past three days.

• H5. How many times in the past three days have you played a game or done other fun things with {CHILD}? 
  _____________________________(ENTER NUMBER OF TIMES)

• H6. How many times in the past three days have you praised {CHILD} for behaving well?
  _____________________________(ENTER NUMBER OF TIMES)
• H7. How many times in the past three days have you calmly explained to {CHILD} why {FILL his/her} behavior was wrong?
  ____________________(ENTER NUMBER OF TIMES)
• H8. How many times in the past three days have you given {CHILD} a more severe punishment than you usually would because you were in a bad mood?
  ____________________(ENTER NUMBER OF TIMES)
• H9INTRO. Now I’m going to ask some questions about different methods of discipline. How many times in the past three days did you do each of the following after your child did something wrong.
• H9. How many times in the past three days did you spank {CHILD} with your hand?
  ____________________(ENTER NUMBER OF TIMES)
• H10. How many times in the past three days, have you yelled or screamed at {CHILD}?
  ____________________(ENTER NUMBER OF TIMES)
• H11INTRO. Now I have some questions about your thoughts about the future.
• H11. When {CHILD} is grown, do you expect that (his/her) financial situation will be...
  1  Better than yours,
  2  About the same as yours, or
  3  Worse than yours?
• H12. How far in school do you think that {CHILD} will go?
  1  Won’t finish high school,
  2  Will graduate from high school,
  3  Will go to vocational, trade or business school,
  4  Will go to college, or
  5  Will go to graduate school?
• H13. In general, do you think a college education is...
  1  Very important
  2  Somewhat important, or
  3  Not very important?
• H14. How likely is it your family will find a way to work out the costs of college for {CHILD}?

INTERVIEWER: IF RESPONDENT HAS NO OTHER FAMILY, CONSIDER RESPONDENT AS FAMILY.

1 Very likely
2 Somewhat likely
3 Somewhat unlikely
4 Very unlikely

• H15. How important is it that {CHILD} goes to college? Would you say…

1 very important,
2 somewhat important, or
3 not very important

• H16. There are many ways to pay for a college education. Imagine someone in the same family and financial circumstances as you are who wanted a child to attend college. [PAUSE] What do you think would be the most important source of money to pay for the child’s college education?

What would be the next most important source of money to pay for the child's college education?

And what would be the third most important source of money to pay for the child’s college education?

1 SAVINGS/INVESTMENTS
2 SCHOLARSHIPS
3 GRANT/FINANCIAL AID
4 STUDENT WORK STUDY
5 STUDENT LOANS
6 OTHER HOUSEHOLD BORROWING (HOME EQUITY, CREDIT CARD)
7 HELP FROM FAMILY/FRIENDS/OTHER ADULTS (INCLUDES INHERITANCES, TRUSTS, GIFTS, LOANS)
8 ADDITIONAL JOB/EARNINGS/WORK
9 REDUCE HOUSEHOLD SPENDING
10 SELL OTHER ASSETS
11 OTHER:______________(SPECIFY)
I. **Age and Stages: Social/Emotional Scale Standardized Instrument**

- **IINTRO.** I’d like to ask you some more questions about {CHILD}. Please listen to each question and tell me whether the behavior describes {FILL him/her} most of the time, sometimes, or rarely or never.

{PROGRAMMER: INSERT RESPONSE OPTIONS FOR I1 – I3, I6, I10, AND I13.}

<table>
<thead>
<tr>
<th>Question</th>
<th>Most of the Time</th>
<th>Sometimes</th>
<th>Rarely or Never</th>
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<tbody>
<tr>
<td>I1. How often does {FILL CHILD} talk or play with adults {FILL s/he} knows well?</td>
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<td>I2. When upset, how often can {FILL CHILD} calm down within minutes?</td>
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<td>I3. How often does {FILL CHILD} seem too friendly with strangers?</td>
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<td>I4. How often can {FILL CHILD} settle {FILL him/herself} down after periods of exciting activity?</td>
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<td>I5. How often does {FILL CHILD} cry, scream, or have tantrums for long periods of time?</td>
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<td>I6. How often do you and {FILL CHILD} enjoy meal times together?</td>
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<td>I7. How often does {FILL CHILD} do what you ask {FILL her/him} to do?</td>
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<td>I8. How often does {FILL CHILD} seem more active than other children {FILL his/her} age?</td>
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<td>I9. How often can {FILL CHILD} stay with activities he enjoys for at least 10 minutes, not including watching television?</td>
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<td>I10. How often can {FILL CHILD} move from one activity to the next with little difficulty, such as from playtime to mealtime?</td>
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<td>I11. How often does {FILL CHILD} do things over and over and can’t seem to stop? Examples are rocking, handflapping, spinning.</td>
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<td>I12. How often does {FILL CHILD} follow rules (at home, at child care)?</td>
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<tr>
<td>Question</td>
<td>Most of the Time</td>
<td>Sometimes</td>
<td>Rarely or Never</td>
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<td>I13. How often does {FILL CHILD} destroy or damage things on purpose?</td>
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<td>I14. How often can {FILL CHILD} name a friend?</td>
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<tr>
<td>I15. How often do other children like to play with {FILL CHILD}?</td>
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<tr>
<td>I16. How often does {FILL CHILD} like to play with other children?</td>
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<tr>
<td>I17. How often does {FILL CHILD} try to hurt other children, adults, or animals—for example by kicking or biting?</td>
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J. Income

- J1INTRO. Now I'm going to change the focus and ask about income.
  {INTERVIEWER: PAUSE}

- J1. Did you receive any income from a job in 2010?
  
  1. YES
  2. NO

- J2. {IF J1 = YES} I'm going to ask about your wages in 2010. Is it easier for you to tell me how much you were paid by the hour, day, week, month, or year?
  
  INTERVIEWER NOTE: IF MORE THAN 1 JOB, ASK ABOUT JOB WHERE RESPONDENT CURRENTLY WORKS THE MOST NUMBER OF HOURS
  
  1. HOURLY,
  2. DAILY,
  3. WEEKLY,
  4. TWICE A MONTH,
  5. MONTHLY,
  6. ANNUALLY, OR
  7. SOME OTHER WAY? (SPECIFY: _____________________)

- J3. {IF J1 = YES} What was your {FILL J2} pay before taxes and deductions in 2010?
  
  $___________________ AMOUNT EARNED
  
  {PROGRAMMER: LOOP THROUGH J4 –J6 FOR EACH PERSON OVER 18 IN THE HOUSEHOLD, AS DETERMINED FROM A3}

- J4. Did your {FILL RELATION TO RESPONDENT, FIRST NAME} receive any income from a job in 2010?
  
  1. YES
  2. NO
• J5. {IF J4 = YES} I’m going to ask about {FILL his/her} wages in 2010. Is it easier for you to tell me how much {FILL he/she} was paid by the hour, day, week, month, or year?

INTERVIEWER: IF MORE THAN 1 JOB, ASK ABOUT JOB WHERE ADULT CURRENTLY WORKS THE MOST NUMBER OF HOURS

1. HOURLY,
2. DAILY,
3. WEEKLY,
4. TWICE A MONTH,
5. MONTHLY,
6. ANNUALLY, OR
7. SOME OTHER WAY? (SPECIFY: ______________________)

• J6. {IF J5 = YES} What was {FILL his/her} {FILL J5} pay before taxes and deductions in 2010?

$ ___________________ AMOUNT EARNED

• J7. During 2010, did you or any member of your household receive any income from the following sources?

INTERVIEWER: READ EACH QUESTION IN THE LIST BELOW

<table>
<thead>
<tr>
<th>QUESTION</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>J8. During 2010, did you or any member of your household receive any income from self-employment?</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>J9. During 2010, did you or any member of your household receive any income from TANF, which is also called welfare?</td>
<td>☐</td>
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<tr>
<td>J10. From SSI or SSDI, which is also called disability?</td>
<td>☐</td>
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<tr>
<td>J11. From food stamps or SNAP?</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>J12. From Social Security Retirement or Survivor’s benefits?</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>J13. During 2010, did you or any member of your household receive any income from other retirement income, including pensions?</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>J14. From unemployment benefits?</td>
<td>☐</td>
<td>☐</td>
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<tr>
<td>J15. From veteran’s benefits?</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>J16. During 2010, did you or any member of your household receive any income from payments for providing foster care?</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>J17. From alimony, maintenance, or child support payments?</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>
INTERVIEWER: READ EACH QUESTION IN THE LIST BELOW

| J18. From other money from a current or former spouse or partner who doesn’t live with you? | YES | NO |
| J19. During 2010, did you or any member of your household receive any income from money provided by friends or family? | | |
| J20. From occasional work, like hairdressing, baby-sitting, repairs, yard work, or selling things that you make? | | |
| J21. From investments? | | |
| J22. During 2010, did you or any member of your household receive any money from the Earned Income Tax Credit, or EITC? | | |
| J23. During 2010, did you or any member of your household receive any income from any other sources? INTERVIEWER: INCLUDE THINGS SOLD AT YARD SALES OR ON CRAIGSLIST | | |
| J23A. {IF J23 = 1} What kind of income is that? | | |
| J24. Have you filed an Oklahoma state income tax return for 2010? | YES | NO |
| J24a. {IF J24=NO} Do you plan to file? | YES | NO |
| J25. Have you filed a federal income tax return for 2010? | YES | NO |
| J25a. {IF J25=NO} Do you plan to file? | YES | NO |
| J26. {If J25=1} On your federal income tax return for 2010, did you claim the standard deduction or did you itemize deductions? | CLAIMED STANDARD DEDUCTION | ITEMIZED DEDUCTIONS |
• J27. Thinking about all of the sources of income you have told me about, what was the total income before taxes for your household during 2010?

$ ____________________    TOTAL YEARLY INCOME

{unfolding brackets for DK/REF:
Under $5000
$5000 - $10,000
$10,000 - $20,000
$20,000 - $50,000
More $50,000}

• J28. Next I’m going to ask you some questions about how you manage money.

Suppose you had some extra money, say $200. What would you probably do with that money?

1    Spend all of it,
2    Spend most of it,
3    Save most of it, or
4    Save all of it?

• J28a. {if J28 = 1 or 2} What would you spend it on?

[RECORD VERBATIM RESPONSE: ________________________________]

• J29. About how much do you think you should have saved for emergencies and other unexpected things that may come up?

$ _____________ AMOUNT SAVED (IF NONE, ENTER 0)

• J30. For the following statements, please tell me if it’s often, sometimes, or rarely true for your family.

INTERVIEWER NOTE: IF RESPONDENTS ASK HOW TO DEFINE THEIR FAMILIES, ASK THEM TO THINK ABOUT THEIR FAMILY IN THE WAY THAT IS MOST MEANINGFUL TO THEM

My family sets financial goals for our future. Is that …

1    Often,
2    Sometimes, or
3    Rarely true?

• J31. I keep track of my spending. Is that …

1    Often,
2    Sometimes, or
3    Rarely true for you?
K. Savings and Assets

- K1INTRO. Now I have some questions about various kinds of assets and savings you may have. {INTERVIEWER: PAUSE}

- K1. Do you {FILL “or your spouse/partner”} have a checking account?
  1. YES
  2. NO

- K1a. {IF K1=YES} How much do you {FILL “and your spouse/partner”} have in total in checking accounts?
  __________________ (ENTER AMOUNT)
  {unfolding brackets for DK/RF: Under $100, $100 to $250, $250 to $500, $500 to $1,000, $1,000 to $2,000, Over $2,000}

- K2. Do you {FILL “or your spouse/partner”} have a savings account?
  1. YES
  2. NO

- K2a. {IF K2=YES} How much do you {FILL “and your spouse/partner”} have in total in savings accounts?
  __________________ (ENTER AMOUNT)
  {unfolding brackets for DK/RF: Under $100, $100-$250, $250-$500, $500-$1,000, $1,000-$3,000, $3,000-$5,000, $5,000-$50,000, Over $50,000}
• K3. Do you {FILL “or your spouse/partner”} own any vehicles?

   PROMPT IF NEEDED: Like cars, trucks, motorcycles, mopeds, a trailer, a motor home, a boat, 4-wheeler, jet ski, or an airplane.

   1    YES
   2    NO

• K3a. {If K3=1} If you sold all those vehicles and paid off anything you owed on them, about how much would you have?

   ____________________ (ENTER AMOUNT)

   {unfolding brackets for DK/RF:
   Under $1,000
   $1,000-$5,000
   $5,000-$10,000
   $10,000-$15,000
   $15,000-$25,000
   Over $25,000}

• K4. Do you {FILL “or your spouse/partner”} have any money saved for any child in a special account known 529 plan or college savings plan?

   1    YES
   2    NO

• K4a. {IF K4=YES} How much do you {FILL “and your spouse/partner”} have in a 529 plan or college savings plan?

   ____________________ (ENTER AMOUNT)

   {unfolding brackets for DK/RF:
   Under $1,000
   $1,000-$3,000
   $3,000-$5,000
   $5,000-$10,000
   $10,000-$25,000
   Over $25,000}

• K5. Do you {FILL “or your spouse/partner”} have any savings at home or with a trusted friend or family members?

   1    YES
   2    NO
K5a. If K5=1] About how much do you have in savings at home or with a trusted friend or family members?

__________________ (ENTER AMOUNT)

{unfolding brackets for DK/RF:
Under $200
$200-$500
$500-$1,000
$1,000-$3,000
$3,000-$5,000
$5,000-$10,000
Over $10,000}

{NOTE TO SPEC’ER: ITEMS K6 – K15B ARE DETERMINED BY THE RESPONDENT’S MARITAL STATUS OR PARTNER RELATIONSHIP.

- SINGLE PERSON: GO STRAIGHT THROUGH K6 – K15B. QUESTIONS WILL BE WORDED LIKE ALL THE ASSETS QUESTIONS THE RESPONDENT HAS ALREADY BEEN ASKED ABOVE.
- RESPONDENT WITH A PARTNER: GO THROUGH THE ASSETS QUESTIONS UP TO K5A ASKING ABOUT THE RESPONDENT/PARTNER UNIT. SHE WILL THEN BE ASKED K6 – K15B FOR HERSELF AND THEN K6 – K15B FOR HER PARTNER.}

K6INTRO. Now I’d like to ask some questions about some other assets you may have.

{IF R HAS A PARTNER} I will first ask about assets you may have. I will then ask about assets your partner, {FILL PARTNER’S NAME}, may have.

K6. Do you have money in any IRAs?

{IF MARRIED: “Do you or your husband”}

{IF PARTNER: ask first about R, then loop back to ask about partner “does your partner”}

1 YES
2 NO
• K7. {IF K6=1} How much do you have in total in IRAs?

{IF MARRIED: “do you and your spouse”}

{IF PARTNER: ask first about R, then loop back to ask about partner “does your partner”}

___________________ (ENTER AMOUNT)

{unfolding brackets for DK/RF:
Under $1,000
$1,000-$3,000
$3,000-$5,000
$5,000-$10,000
$10,000-$25,000
Over $25,000}

• K8. {IF K6=1} Did you contribute to an IRA FOR TAX YEAR 2010?

{IF MARRIED: “Did you or your spouse”}

{IF PARTNER: ask first about R, then loop back to ask about partner “Did your partner”}

{INTERVIEWER INSTRUCTION: IF “YES” PROMPT}

PROMPT: Please do not include any money rolled over from a pension plan or an employer- saving plan like a 401(k).

1 YES
2 NO

• K8a. {IF J25=2 AND K8=2} Before you file your taxes for 2010, do you plan to contribute to your IRA?

1 YES
2 NO
• K9. {IF K8=1 or K8a=YES} In total, how much {if K8a=YES FILL “do you plan to”; ELSE FILL “did you”} contribute in 2010?

{IF MARRIED: “did you and your spouse”}

{IF PARTNER: ask first about R, then loop back to ask about partner “did your partner”}

$ ______________ AMOUNT CONTRIBUTED

{unfolding brackets for DK/RF:
Under $250
$250-$500
$500-$1000
$1000-$5000
More than $5000}

{SPOUSE LOOP: IF R HAS SPOUSE LOOP THROUGH K10INTRO-K15b for R then spouse}

• K10INTRO. {IF R HAS A SPOUSE} Now I’d like to ask some questions about some other retirement savings your household may have. I will first ask about retirement savings you may have. I will then ask about retirement savings your husband, {FILL SPOUSE’S NAME}, may have. {IF K1, K2, K4 or K5 = YES} You’ve already told me about your {FILL LIST OF ASSETS GIVEN SO FAR BASED ON K1 “checking account”, K2 “savings account”, K4 “college savings plan or 529 account”, K6 “IRAs”}.

• K10. Other than what you have just told me about, {FILL do you/does your spouse/does your partner} have any retirement accounts such as a 401(k) or 403(b)?

{IF MARRIED OR HAS PARTNER: ASK FIRST ABOUT R, THEN LOOP BACK TO ASK ABOUT SPOUSE/PARTNER}

INTERVIEWER: THESE OTHER RETIREMENT ACCOUNTS ALSO INCLUDE SEP, KEOGH, AND SRA ACCOUNTS.

1 YES
2 NO
• **K11.**  {IF K10=1} How much do you have in total in those retirement accounts?

{IF MARRIED OR HAS PARTNER:  ask first about R, then loop back to ask about spouse/partner}

___________________ (ENTER AMOUNT)

{unfolding brackets for DK/RF:
Under $1,000
$1,000-$3,000
$3,000-$5,000
$5,000-$10,000
$10,000-$25,000
Over $25,000}

• **K12.**  {IF EMPLOYED: IF C1=1 for RESPONDENT OR IF C4=1 FOR SPOUSE/PARTNER} Does your employer or union offer any kind of pension plan you are eligible for?

{IF MARRIED OR HAS PARTNER:  ask first about R, then loop back to ask about spouse/partner}

1 YES
2 NO

• **K13.**  {IF EMPLOYED: IF C1=1 for RESPONDENT OR IF C4=1 FOR SPOUSE/PARTNER} Does your employer or union offer any kind of 401(k) or 403(b) plan?

{IF MARRIED OR HAS PARTNER:  ask first about R, then loop back to ask about spouse/partner}

1 YES
2 NO

• **K14.**  {IF K13=1} Did you contribute to this 401(k) or 403(b) in 2010?

{IF MARRIED OR HAS PARTNER:  ask first about R, then loop back to ask about spouse/partner}

1 YES
2 NO
• K15.  {IF K14=1} In total, how much did you contribute in 2010?

  {IF MARRIED OR HAS PARTNER: ask first about R, then loop back to ask about spouse/partner}

  $ ______________ AMOUNT CONTRIBUTED

  %______________PERCENT OF PAY

  {unfolding brackets for DK/RF:
  Under $500
  $500 - $1,000
  $1,000-$5,000
  $5000-$10,000
  More than $10,000}

• K15a.  {IF K13=1} Does your employer or union match any contributions you make to this saving plan?

  {IF MARRIED OR HAS PARTNER: ask first about R, then loop back to ask about spouse/partner}

  1    YES
  2    NO

• K15b.  {IF K15a=1} What is {FILL FOR R="your “, FILL FOR SPOUSE/PARTNER} “your spouse/partner’s”} employer’s match rate?

  ____________________ FILL VERBATIM RESPONSE

  {END OF SPOUSE AND PARTNER LOOPS}

• K16.  Do you {FILL “or your husband/wife/partner”} have any other savings or assets? You have already told me about, your {FILL LIST OF ASSETS GIVEN SO FAR BASED ON D1 “your home”, K1 “checking account”, K2 “savings account”, K4 “college savings plan or 529 account”, K6 “IRAs”, K9 or K11 “retirement accounts or pensions”}. Do you {FILL “or your husband/wife/partner”} have any other savings or assets, such as stocks, bonds, CDs, money market funds, business or real estate assets?

  1    YES
  2    NO
• K17INTRO. {IF K16=YES} I’d like to ask you some questions about which of these other assets you may have.

• K17. {IF K16=YES} Do you {FILL “or your husband/wife/partner”} have any money market funds?
  1   YES
  2   NO

• K17a. {IF K17=YES} How much do you {FILL “and your husband/wife/partner”} have in total in money market funds?

__________________ (ENTER AMOUNT)

{unfolding brackets for DK/RF:
Under $500
$500-$1,000
$1,000-$2,000
$5,000-$10,000
Over $10,000}

• K18. {IF K16=YES} Other than anything you have already told me about, do you {FILL “or your husband/wife/partner”} have any shares of stock, stock mutual funds, or exchange traded funds?
  1   YES
  2   NO

• K18a. {If K18=YES} If you sold all those, about how much would you have?

__________________ (ENTER AMOUNT)

{unfolding brackets for DK/RF:
Under $1,000
$1,000-$3,000
$3,000-$5,000
$5,000-$10,000
$10,000-$25,000
$25,000-$50,000
Over $50,000}

• K19. {IF K16=YES} Other than what you have already told me about, do you {FILL “or your husband/wife/partner”} have any bonds?

PROMPT (IF NECESSARY): Any corporate, municipal, government or foreign bonds, or bond funds?
  1   YES
  2   NO
• K20. {If K19=1} If you sold all those, about how much would you have?

__________________ (ENTER AMOUNT)

{unfolding brackets for DK/RF:
  Under $100
  $100-$250
  $250-$350
  $350-$500
  $500-$1,000
  Over $1,000}

• K21. {IF K16=YES} Aside from anything you have already told me about, do you {FILL “or your husband/wife/partner”} have any certificates of deposit or CDs?

  1  YES
  2  NO

• K22. {IF K21=1} If you added up all such accounts, about how much would they amount to right now?

__________________ (ENTER AMOUNT)

{unfolding brackets for DK/RF:
  Under $500
  $500-$1,000
  $1,000-$2,000
  $2,000-$5,000
  $5,000-$10,000
  Over $10,000}

• K23. {IF K16=YES} Do you {FILL “or your husband/wife/partner”} own part or all of a business or farm?

  1  YES
  2  NO

• K24. {If K23=1}  If you sold all those and paid off anything you owed on them, about how much would you have?

__________________ (ENTER AMOUNT)

{unfolding brackets for DK/RF:
  Under $1,000
  $1,000-$10,000
  $10,000-$25,000
  $25,000-$75,000
  Over $75,000}
• K25. {IF K16=YES} Do you {FILL “or your husband/wife/partner”} have any other real estate {FILL IF HOMEOWNER =(other than your main home) }, such as another home, second home, vacation home, cottage/cabin, land, rental real estate, or money owed to you on a land contract or mortgage? Please do not include business or farm real estate.

1  YES
2  NO

• K26. {If K25=1} If you sold all those and paid off anything you owed on them, about how much would you have?

__________________ (ENTER AMOUNT)

{unfolding brackets for DK/RF:
Under $5,000
$5,000-$10,000
$10,000-$25,000
$25,000-$50,000
$50,000-$75,000
Over $75,000}

• K27. {IF K16=YES} Do you {FILL “or your husband/wife/partner”} have any other savings or assets you have not told me about?

PROMPT: Assets such as jewelry, money owed to you by others, a collection for investment purposes, benefits from a trust that you haven't already told us about?

1  YES
2  NO

• K28. {IF K27=1} If you sold all those and paid off anything you owed on them, about how much would you have?

__________________ (ENTER AMOUNT)

{unfolding brackets for DK/RF:
Under $200
$200-$500
$500-$1,000
$1,000-$3,000
$3,000-$5,000
$5,000-$10,000
Over $10,000}
• K29. Now think about all the savings and assets you have told me about. {INTERVIEWER: PAUSE} Are any of these set aside specifically for {CHILD}’s college or post-secondary education?

1 YES  
2 NO

• K30. {IF K29=YES} How much in total are earmarked specifically for {CHILD}’s college or post-secondary education?

_______________(ENTER AMOUNT)

{unfolding brackets for DK/RF: Under $100  
$100 - $250  
$250 - $500  
$500- $1000  
$1000 - $5,000  
Over $5,000}

• K34INTRO. {IF K29=YES} Now I’d like to know where the funds for {CHILD}’s college education are saved and invested. I’ll read you a list. Please tell me whether you have funds specifically for {CHILD}’s education in each.

{PROGRAMMER: UNFOLDING BRACKETS FOR ALL K34 ITEMS WILL MIRROR THOSE FOR THE EQUIVALENT ASSET ABOVE, E.G., UNFOLDING BRACKETS FOR K34a2 WILL BE THE SAME AS THOSE FOR K1a ABOVE}

• K34a1. {IF K29=YES AND K1=YES} Do you have funds specifically set aside for {CHILD}’s education in a checking account?

1 YES  
2 NO

• K34a2. {IF K34a1=YES} How much is saved for {CHILD}’s college education in a checking account?

_______________ (ENTER AMOUNT)

• K34b1. {IF K29=YES AND K2=YES} Do you have funds specifically set aside for {CHILD}’s education in a savings account?

1 YES  
2 NO

• K34b2. {IF K34b1=YES} How much is saved for {CHILD}’s college education in a savings account?

_______________ (ENTER AMOUNT)
• K34c1. {IF K29=YES AND K17=YES} Do you have funds specifically set aside for {CHILD}’s education in a money market account?
   1   YES
   2   NO

• K34c2. {IF K34c1=YES} How much is saved for {CHILD}’s college education in a money market account?
   ______________________ (ENTER AMOUNT)

• K34d1. {IF K29=YES AND K6=YES} Do you have funds specifically set aside for {CHILD}’s education in IRAs?
   1   YES
   2   NO

• K34d2. {IF K34d1=YES} How much is saved for {CHILD}’s college education in IRAs?
   ______________________ (ENTER AMOUNT)

• K34e1. {IF K29=YES AND K10=YES} Do you have funds specifically set aside for {CHILD}’s education in retirement accounts, such as a 401(k), 403(b), SEP, Keogh, or SRA?
   1   YES
   2   NO

• K34e2. {IF K34e1=YES} How much is saved for {CHILD}’s college education in retirement accounts, such as a 401(k), 403(b), SEP, Keogh, or SRA?
   ______________________ (ENTER AMOUNT)

• K34f1. {IF K29=YES AND K18=YES} Do you have funds specifically set aside for {CHILD}’s education in shares of stock or mutual funds?
   1   YES
   2   NO

• K34f2. {IF K34f1=YES} How much is saved for {CHILD}’s college education in shares of stock or mutual funds?
   ______________________ (ENTER AMOUNT)
• K34g1. {IF K29=YES AND K18= YES} Do you have funds specifically set aside for {CHILD}’s education in bonds?

  PROMPT (IF NECESSARY) corporate, municipal, government or foreign bonds, or bond funds?

  1  YES
  2  NO

• K34g2. {IF K34g1=YES} How much is saved for {CHILD}’s college education in bonds?

  _____________________ (ENTER AMOUNT)

• K34h1. {IF K29=YES AND K21= YES} Do you have funds specifically set aside for {CHILD}’s education in CDs or Treasury Bills?

  1  YES
  2  NO

• K34h2. {IF K34h1=YES} How much is saved for {CHILD}’s college education in CDs or Treasury Bills?

  _____________________ (ENTER AMOUNT)

• K34i1. {IF K29=YES AND K4= YES} Do you have funds specifically set aside for {CHILD}’s education in a college savings plan or 529 plan in the state of Oklahoma called an Oklahoma College Savings Plan?

  1  YES
  2  NO

• K34i2. {IF K34i1=YES} How much is saved for {CHILD}’s college education in a college savings plan or 529 plan in the state of Oklahoma called an Oklahoma College Savings Plan?

  _____________________ (ENTER AMOUNT)

• K34i3. {IF (K34i1=NO or K4=NO) AND TREATMENT=1} The State of Oklahoma deposited $1,000 into an Oklahoma College Savings Plan for {CHILD}. How aware are you of this account for {CHILD}?

  1  Very aware,
  2  somewhat aware,
  3  or not at all aware.

• K34i4. {IF K34i1=YES AND TREATMENT=1} Does {AMOUNT FROM K34} include the $1000 the state of Oklahoma deposited on behalf of {FILL CHILD}?

  1  YES
  2  NO
• K34i5. {IF K34i1=YES AND TREATMENT=1 AND R HAS OWN ACCOUNT FROM ACCOUNT MONITORING DATA} Does this include $100 the state of Oklahoma deposited to open your own account?
   1  YES
   2  NO

• K34i6. {IF K34i1=YES} Is this money invested mostly in the….
   1  managed allocation option
   2  the diversified equity option
   3  the 100% equity option,
   4  the balanced option,
   5  the fixed income option, or
   6  the guaranteed option?

• K34i7. {IF K34i1=YES} Where did you get most of the money that you put into your Oklahoma College Savings Plan account for {CHILD}?  
   1  WAGES FROM A JOB
   2  WAGES FROM A SECOND JOB
   3  GIFTS
   4  TAX REFUND OR EITC
   5  REDUCED SPENDING (USED GROCERY COUPONS, STOPPED SMOKING, NO NEW SHOES)
   6  MOVED MONEY FROM OTHER INVESTMENTS
   7  OTHER: SPECIFY (______________________________________)

• K34j1. {IF K29=YES AND K21=YES} Do you have funds specifically set aside for {CHILD}’s education in a college savings plan or 529 plan from a state other than Oklahoma?
   1  YES
   2  NO

• K34j2. {IF K34j1=YES} How much is saved for {CHILD}’s college education in a college savings plan or 529 plan from a state other than Oklahoma?
   __________________ (ENTER AMOUNT)

• K35. {IF K34i1=YES FILL “Has anyone besides you {FILL “or your husband/wife/partner”} opened a 529 account for {CHILD}?”}  
   IF K34i1=NO FILL “Has anyone opened a 529 account for {CHILD}?”
   1  YES
   2  NO
K36. {IF K30 ≠ 2 FILL “Aside from what you have already told me about”} {ALL} Have any other people ever saved any other money specifically for {CHILD}’s college education? People like extended family members, friends, or other adults?

1    YES
2    NO

K37. {IF K36=1 or K35=1} In total, about how much money is do other people have saved for {CHILD}’s college education, {IF K35=YES} including in 529 accounts?

{IF NONE, ENTER 0}

$ ______________ AMOUNT SAVED

{unfolding brackets for DK/RF:
Under $250
$250 - $500
$500 - $1,000
$1,000 - $5000
$5,000 - $10,000
More than $10,000}

K38. {ASK ONLY IF > {CHILD} IN HOUSEHOLD ROSTER} Now I’d like you think about any savings you {FILL “or your spouse/partner”} have for any other children in your household. Do not include any savings for {CHILD} you have already told me about. {INTERVIEWER: PAUSE} Are any of these earmarked specifically for any other children’s college or post-secondary education?

1    YES
2    NO

K38a. {IF K38=YES} How much in total are earmarked specifically for any other children’s college or post-secondary education?

______________ (ENTER AMOUNT)

{unfolding brackets for DK/RF:
Under $100
$100 - $250
$250 - $500
$500- $1000
$1000 - $5,000
Over $5,000}
• K39 INTRO. {IF K38=YES} Now I’d like to know where the funds for all of the other children in your household’s college education are saved and invested. I’ll read you a list. Please tell me whether you have funds specifically for any child’s education in each.

{PROGRAMMER NOTE: UNFOLDING BRACKETS FOR ALL K39 ITEMS WILL MIRROR THOSE FOR THE EQUIVALENT ASSET ABOVE.}

• K39a1. {IF K38=YES AND K1=YES} Do you have funds specifically set aside for any other children’s education in a checking account?
  1. YES
  2. NO

• K39a2. {IF K39a1=YES} How much is saved for any other children’s college education in a checking account?
  _____________ (ENTER AMOUNT)

• K39b1. {IF K38=YES AND K2=YES} Do you have funds specifically set aside for any other children’s education in a savings account?
  1. YES
  2. NO

• K39b2. {IF K39b1=YES} How much is saved for any other children’s college education in a savings account?
  _____________ (ENTER AMOUNT)

• K39c1. {IF K38=YES AND K17=YES} Do you have funds specifically set aside for any other children’s education in a money market account?
  1. YES
  2. NO

• K39c2. {IF K39c1=YES} How much is saved for any other children’s college education in a money market account?
  _____________ (ENTER AMOUNT)

• K39d1. {IF K38=YES AND K6=YES} Do you have funds specifically set aside for any other children’s education in IRAs?
  1. YES
  2. NO
• K39d2. {IF K39d1=YES} How much is saved for any other children’s college education in IRAs?
  __________________ (ENTER AMOUNT)

• K39e1. {IF K38=YES AND K10=YES} Do you have funds specifically set aside for any other children’s education in retirement accounts, such as a 401(k), 403(b), SEP, Keogh, or SRA?
  
  1 YES
  2 NO

• K39e2. {IF K39e1=YES} How much is saved for any other children’s college education in retirement accounts, such as a 401(k), 403(b), SEP, Keogh, or SRA?
  __________________ (ENTER AMOUNT)

• K39f1. {IF K38=YES AND K18=YES} Do you have funds specifically set aside for any other children’s education in shares of stock or mutual funds?
  
  1 YES
  2 NO

• K39f2. {IF K39f1=YES} How much is saved for any other children’s college education in shares of stock or mutual funds?
  __________________ (ENTER AMOUNT)

• K39g1. {IF K38=YES AND K18=YES} Do you have funds specifically set aside for any other children’s education in bonds?
  
  PROMPT (IF NECESSARY) corporate, municipal, government or foreign bonds, or bond funds?
  
  1 YES
  2 NO

• K39g2. {IF K39g1=YES} How much is saved for any other children’s college education in bonds? Any corporate, municipal, government or foreign bonds, or bond funds?
  __________________ (ENTER AMOUNT)

• K39h1. {IF K38=YES AND K21=YES} Do you have funds specifically set aside for any other children’s education in CDs or Treasury Bills?
  
  1 YES
  2 NO
• K39h2. {IF K39h1=YES} How much is saved for any other children’s college education in CDs or Treasury Bills?

_________________ (ENTER AMOUNT)

• K39i1. {IF K38=YES AND K4=YES} Do you have funds specifically set aside for any other children’s education in a college savings plan or 529 plan in the state of Oklahoma called an Oklahoma College Savings Plan?

1 YES
2 NO

• K39i2. {IF K39i1=YES} How much is saved for any other children’s college education in a college savings plan or 529 plan in the state of Oklahoma called an Oklahoma College Savings Plan?

_________________ (ENTER AMOUNT)

• K39j1. {IF K38=YES AND K21=YES} Do you have funds specifically set aside for any other children’s education in a college savings plan or 529 plan from a state other than Oklahoma?

1 YES
2 NO

• K39j2. {IF K39j1=YES} How much is saved for any other children’s college education in a college savings plan or 529 plan from a state other than Oklahoma?

_________________ (ENTER AMOUNT)

• K40a. Have you {FILL “or your spouse/partner”} ever saved any money specifically for any other child’s education? Please think about only children who do not live with you.

1 YES
2 NO

• K40b. {IF K40a=1} Please give me the first name of other children you {FILL “or your spouse/partner”} have saved for.

• K40c. {IF K40a=1} What is {CHILD}’s relationship to you {FILL “or your spouse/partner”}?

RESPONDENT’S CHILD
SPOUSE’S CHILD
PARTNER’S CHILD
OTHER RELATIVE (SPECIFY _____________)
OTHER NON-RELATIVE (SPECIFY _____________)
• K40d. In total, how much do you {FILL “or your spouse/partner”} have saved for {CHILD}’s education?

<table>
<thead>
<tr>
<th>Child Name {FILL FROM K47b}</th>
<th>Relationship to R/Spouse/Partner{FILL FROM A3 OR ENTER}</th>
<th>Amount Saved</th>
</tr>
</thead>
<tbody>
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</tbody>
</table>

• K41INTRO. {IF TREATMENT = 1} Now I’d like to ask you some specific questions about the Oklahoma College Savings Plan and a program called SEED for Oklahoma Kids.

• K41. {IF TREATMENT = 1} I understand you may have had the opportunity to open your own Oklahoma College Savings Plan account for {CHILD}. Did you?

1 YES
2 NO

• K42. {IF K41 = 1} Could you tell me why you opened an Oklahoma College Savings Plan account for {CHILD}?

  record verbatim response: ___________________________________________________________

• K43. {IF K41 = 1} INTERVIEWER: DID RESPONDENT MENTION A “$100 DEPOSIT” OR “MATCHING FUNDS”?

1 $100 DEPOSIT
2 MATCHING FUNDS
3 NEITHER
• K44.  {IF K41 = 1} PROBE: Any other reasons?

RECORD VERBATIM RESPONSE ________________________________

• K45.  {IF K41 = 1} INTERVIEWER: DID RESPONDENT MENTION A “$100 DEPOSIT” OR “MATCHING FUNDS”?

1 $100 DEPOSIT
2 MATCHING FUNDS
3 NEITHER
4 NO OTHER REASONS

{ASK K44 AND K45 UNTIL K45=4 OR FOR UP TO EIGHT REASONS}

• K46.  {IF K41=1} Were you aware that you could open this account without depositing any of your own money?

1 YES
2 NO

• K47.  {IF K41=1} Were you aware that the State of Oklahoma offered to deposit $100 if you opened a college savings plan account for {CHILD}?

1 YES
2 NO

• K48.  {K47=YES}

{IF $100 DEPOSIT NOT MENTIONED IN K45 FILL} I understand the State of Oklahoma offered to deposit $100 if you opened a college savings plan account for {CHILD}. On a scale of 1 to 10, how important was that offer to your decision to open an account? If 1 is “not at all important” and 10 is “extremely important,” what would you say?

{IF $100 DEPOSIT MENTIONED IN K45 FILL} You mentioned the $100 deposit. On a scale of 1 to 10, how important was that offer to your decision to open an account? If 1 is “not at all important” and 10 is “extremely important,” what would you say?

LIKERT SCALE OPTIONS OF 1 THROUGH 10

97 DID NOT KNOW ABOUT $100 OFFER, DIDN’T UNDERSTAND ELIGIBILITY

• K49.  {IF K41=1} Were you aware that if you deposited money into this account you may have been eligible for a savings match?

1 YES
2 NO
• K50.  {IF K49=YES}

(IF MATCHING FUNDS NOT MENTIONED IN K45 FILL) I understand some people who deposited money into the college savings plan for {CHILD} may have been eligible for extra funds called matching funds. On a scale of 1 to 10, how important were those matching funds to your decision to open an account? If 1 is “not at all important” and 10 is “extremely important,” what would you say?

{IF MATCHING FUNDS MENTIONED IN K45 FILL} You mentioned matching funds. On a scale of 1 to 10, how important were those matching funds to your decision to open an account? If 1 is “not at all important” and 10 is “extremely important,” what would you say?

LIKERT SCALE OPTIONS OF 1 THROUGH 10

97  DID NOT KNOW ABOUT MATCHING FUNDS, DIDN’T UNDERSTAND ELIGIBILITY

• K51.  {IF K49=YES} Did you think that you would qualify for the savings match?

1   YES
2   NO

• K52.  {IF K41 = NO} Could you tell me why you did not open an Oklahoma College Savings Plan account for {CHILD}?

RECORD VERBATIM RESPONSE: __________________________________________

• K53.  {IF K41 = NO} INTERVIEWER: DID RESPONDENT MENTION A “$100 DEPOSIT” OR “MATCHING FUNDS”?

1   $100 DEPOSIT
2   MATCHING FUNDS
3   NEITHER

• K54.  {IF K41 = NO} PROBE: Any other reasons?

RECORD VERBATIM RESPONSE _________________________________

• K55.  {IF K41=NO} INTERVIEWER: DID RESPONDENT MENTION A “$100 DEPOSIT” OR “MATCHING FUNDS”?

1   $100 DEPOSIT
2   MATCHING FUNDS
3   NEITHER
4   NO OTHER REASONS

{ASK K54 AND K55 UNTIL K55=4 OR FOR UP TO EIGHT REASONS}
• K56.  {IF K41=NO} Were you aware that you could open this account without depositing any of your own money?

  1   YES
  2   NO

• K57.  {IF K41=NO} Were you aware that the State of Oklahoma offered to deposit $100 if you opened a college savings plan account for {CHILD}?

  1   YES
  2   NO

• K58.  {IF K57=YES}

  {IF $100 DEPOSIT NOT MENTIONED IN K55 FILL} I understand the State of Oklahoma offered to deposit $100 if you opened a college savings plan account for {CHILD}. On a scale of 1 to 10, how important was that offer to your decision not to open an account? If 1 is “not at all important” and 10 is “extremely important,” what would you say?

  {IF $100 DEPOSIT MENTIONED IN K55 FILL} You mentioned the $100 deposit. On a scale of 1 to 10, how important was that offer to your decision not to open an account? If 1 is “not at all important” and 10 is “extremely important,” what would you say?

LIKERT SCALE OPTIONS OF 1 THROUGH 10

97   DID NOT KNOW ABOUT $100 OFFER, DIDN’T UNDERSTAND ELIGIBILITY
• K59.  {IF K41=NO} Were you aware that if you deposited money into this account you may have been eligible for a savings match?
   1   YES
   2   NO

• K60.  {K59=YES}

   {IF MATCHING FUNDS NOT MENTIONED K55 FILL} I understand some people who deposited money into the college savings plan for {CHILD} may have been eligible for extra funds called matching funds. On a scale of 1 to 10, how important were those matching funds to your decision not to open an account? If 1 is “not at all important” and 10 is “extremely important,” what would you say?

   {IF MATCHING FUNDS MENTIONED IN K55 FILL} You mentioned matching funds. On a scale of 1 to 10, how important were those matching funds to your decision not to open an account? If 1 is “not at all important” and 10 is “extremely important,” what would you say?

   LIKERT SCALE OPTIONS OF 1 THROUGH 10

   97   DID NOT KNOW ABOUT MATCHING FUNDS, DIDN’T UNDERSTAND ELIGIBILITY

• K61.  {IF K59=YES} Did you think that you would qualify for the savings match?
   1   YES
   2   NO

Now I’d like to ask some questions about where you do your financial transactions.

• K62. Have you or anyone in your household ever gone to a place other than a bank, a savings and loan, or a credit union to cash a check?
   1   YES
   2   NO

• K63.  {IF K62=YES} How often do you or anyone in your household cash a check at a place other than a bank?
   1   At least a few times a year
   2   Once or twice a year
   3   Almost never
K64. {IF K62=YES} Why was a check cashed at a place other than a bank, savings and loan, or credit union?

1. DON’T HAVE A BANK ACCOUNT
2. TO GET MONEY FASTER
3. THE PLACE IS MORE CONVENIENT
4. A BANK CHARGES MORE TO CASH CHECKS
5. THE PLACE TO CASH CHECKS ASKS FOR FEWER ID’S
6. FEEL MORE COMFORTABLE THAN AT A BANK
7. OTHER (SPECIFY)______________________________
L. Debt

- LINTRO. I’m going to ask you about money you {FILL IF MARRIED=”or your husband”; FILL IF PARTNER=”or your partner”} may owe or bills you {FILL IF MARRIED=”or your husband;” FILL IF PARTNER=”or your partner”} may have.

- L1. Do you have a major credit card, like Visa, MasterCard, Discover, or American Express?

  PROMPT: A major credit card can be used at many different stores.

  1 YES
  2 NO

- L2. {IF L1 = 1} If you have more than one major credit card, please think about the one you use most often. Each month, do you pay off the entire balance:

  1 Always or almost always,
  2 Sometimes,
  3 Or hardly ever?
  4 OTHER (Specify: ____________________________)
  5 NA, DON’T USE THE CARD

- L3. Do you {FILL IF MARRIED=”or your husband”; FILL IF PARTNER=”or your partner”} owe any money on credit cards?

  1 YES
  2 NO

- L3a. How much do you {FILL IF MARRIED=”and your husband”; FILL IF PARTNER=”and your partner”} owe in total on credit cards?

  $ ____________ AMOUNT

  {unfolding brackets for DK/RF:
  Under $500
  $500-$1,000
  $1,000-$2,000
  $2,000-$3,000
  $3,000-$5,000
  $5,000-$10,000
  Over $10,000}

  {PROGRAMMER: RANDOMIZE L4 – L10A BY LOGICAL TWO QUESTION CHUNKS}
L4. Do you {FILL IF MARRIED="or your husband"; FILL IF PARTNER="or your partner"} owe any money on student loans?

1 Yes
2 No

L4a. {IF L4=1} How much do you {FILL IF MARRIED="and your husband"; FILL IF PARTNER="and your partner"} owe in total on student loans?

___________________ (ENTER AMOUNT)

{unfolding brackets for DK/RF:
Under $1,000
$1,000-$3,000
$3,000-$5,000
$5,000-$10,000
$10,000-$15,000
$15,000-$25,000
Over $25,000}

L5. Do you {FILL IF MARRIED="or your husband"; FILL IF PARTNER="or your partner"} owe any money on car loans or other vehicle loans?

1 YES
2 NO

L5a. {IF L5=YES} How much do you {FILL IF MARRIED="and your husband"; FILL IF PARTNER="and your partner"} owe in total on car loans or other vehicle loans?

___________________ (ENTER AMOUNT)

{unfolding brackets for DK/RF:
Under $1,000
$1,000-$5,000
$5,000-$10,000
$10,000-$15,000
$15,000-$25,000
Over $25,000}

L6. Aside from what you have already told me about, do you {FILL IF MARRIED="or your husband"; FILL IF PARTNER="or your partner"} owe any money on personal or debt consolidation loans from banks, credit unions, friends, or relatives?

PROMPT: Do not include any mortgage loans.

1 YES
2 NO
• L6a. {IF L6=YES} How much do you {FILL IF MARRIED="and your husband"; FILL IF PARTNER="and your partner"} owe in total on personal loans from banks, credit unions, friends, or relatives?

___________________ (ENTER AMOUNT)

{unfolding brackets for DK/RF:
Under $500
$500-$1,000
$1,000-$3,000
$3,000-$5,000
$5,000-$10,000
Over $10,000}

• L7. Aside from what you have already told me about, do you {FILL IF MARRIED="or your husband"; FILL IF PARTNER="or your partner"} owe any money on medical bills?

1 YES
2 NO

• L7a. {IF L7=YES} How much do you {FILL IF MARRIED="and your husband"; FILL IF PARTNER="and your partner"} owe in total on medical bills?

___________________ (ENTER AMOUNT)

{unfolding brackets for DK/RF:
Under $500
$500-$1,000
$1,000-$3,000
$3,000-$5,000
Over $5,000}

• L8. Aside from what you have already told me about, do you {FILL IF MARRIED="or your husband"; FILL IF PARTNER="or your partner"} owe any money on business loans?

1 YES
2 NO
L8a.  {IF L8=YES} How much do you {FILL IF MARRIED=”and your husband”; FILL IF PARTNER=”and your partner”} owe in total on business loans?

___________________ (ENTER AMOUNT)

{unfolding brackets for DK/RF:
Under $1,000
$1,000-$10,000
$10,000-$25,000
$25,000-$75,000
Over $75,000}

L9. Aside from what you have already told me about, do you {FILL IF MARRIED=”or your husband”; FILL IF PARTNER=”or your partner”} owe any money on installment loans for major items like furniture or appliances?

1 YES
2 NO

L9a.  {IF L9=YES} How much do you {FILL IF MARRIED=”and your husband”; FILL IF PARTNER=”and your partner”} owe in total on installment loans for major items like furniture or appliances?

___________________ (ENTER AMOUNT)

{unfolding brackets for DK/RF:
Under $250
$250-$500
$500-$750
$750-$1,000
$1,000-$3,000
$3,000-$5,000
Over $5,000}

L10. Aside from what you have already told me about, do you {FILL IF MARRIED=”or your husband”; FILL IF PARTNER=”or your partner”} owe any money on property other than your current residence such as another home, land, or real estate? Please do not include business or farm real estate.

1 YES
2 NO
• L10a. {IF L10=YES} How much do you {FILL IF MARRIED="and your husband"; FILL IF PARTNER="and your partner"} owe in total on property other than your current residence? 

PROMPT: such as another home, second home, vacation home, cottage/cabin, land, or rental real estate? Please do not include business or farm real estate.

___________________ (ENTER AMOUNT)

{unfolding brackets for DK/RF: 
Under $5,000 
$5,000-$10,000 
$10,000-$25,000 
$25,000-$50,000 
$50,000-$75,000 
Over $75,000} 

• L11. Aside from what you have already told me about, do you {FILL IF MARRIED="or your husband"; FILL IF PARTNER="or your partner"} owe any money on any other debt?

1 YES 
2 NO

• L11a. {IF L11=YES} How much do you {FILL IF MARRIED="and your husband"; FILL IF PARTNER="and your partner"} owe in total on any other debt?

___________________ (ENTER AMOUNT)

{unfolding brackets for DK/RF: 
Under $250 
$250-$500 
$500-$1,000 
$1,000-$3,000 
$3,000-$5,000 
$5,000-$10,000 
Over $10,000}
M. Economic Pressure and the Recession

I have a few questions about your family’s financial situation.

• M1. During the past 12 months, did your family ...
   1 Always have enough to eat,
   2 Sometimes not have enough to eat, or
   3 Often not have enough to eat?

• M2. During the past 12 months, has your family’s financial situation...
   1 Gotten better,
   2 Gotten worse, or
   3 Stayed the same?

• M3. How hopeful would you say your family’s financial situation looks? Would you say...
   1 Very hopeful,
   2 Somewhat hopeful,
   3 Not very hopeful, or
   4 Not at all hopeful?

• M4. For each of the following, please tell me whether or not it is something that has happened to you {FILL “or your spouse/partner”} in the last three years. ...Have you…

   {PROGRAMMER: START ITEMS M4A – M4C, M4F, AND M4I WITH “In the last three years, have you…”}

   YES | NO | DOES NOT APPLY

   a. Lost a job or became unemployed
   b. Tried but couldn’t find a job
   c. Had salary or hours reduced
   d. Did not receive a raise
   e. Took a lower-paying job
   f. Had trouble getting or paying for medical care for yourself or your family
   g. Had problems paying your rent or mortgage
   h. Lost your house to foreclosure
   i. Had to increase your credit card debt to help pay the bills
   j. Postponed getting married or having a baby
   k. Moved to reduce housing expenses
N. Follow-up and Wrap-up

• N1. We’re now reaching the end of the interview. Because we may contact you again in the future, I’d like to get some background information. Could you please tell me the name of the person in your household who knows the most about your household’s finances?

FIRST NAME ______________________
LAST NAME ______________________

• N2. First, please tell me your full legal name, starting with first, middle, then last.

INTERVIEWER NOTE: DO NOT READ PREFILLED INFORMATION ALOUD.

INTERVIEWER NOTE: IF ANY DOUBT AT ALL, ASK R TO SPELL. IF NO MIDDLE NAME OR INITIAL, LEAVE BLANK

FIRST ________________
MIDDLE ________________
LAST ________________

• N3. Let me confirm your street address. I have it as…

INTERVIEWER NOTE: VERIFY INFORMATION. CORRECT AS NEEDED

STREET ADDRESS: ________________
CITY: ______________________
STATE: ______________________
ZIP: ______________________

• N4. I have as your telephone number {FILL TELEPHONE}. Is this the best phone number to reach you?

INTERVIEWER NOTE: ENTER R’S CURRENT HOME PHONE NUMBER OR THE NUMBER WHERE HE/SHE CAN BE REACHED MOST OFTEN

PHONE: (_____) ________________

• N5. Is this your day or evening phone number?

1  DAY
2  EVENING
3  BOTH
N6. Is this your home phone number, a work number, or some other number?

1. HOME NUMBER
2. WORK NUMBER
3. FRIEND/RELATIVE’S NUMBER
4. CELL PHONE NUMBER
5. OTHER (Specify: ________________________________)

N7. {if N6 ≠ 4} Is that a cell phone?

1. YES
2. NO

N8. {IF N7=NO} Do you have a cell phone number?

1. YES
2. NO

N9. {IF N8=YES} Could I please have that number? ________________

N10. Is there another phone number to use to reach you?

1. YES
2. NO

N11. {IF N10= YES} What is that number?

INTERVIEWER NOTE: IF R HAS MORE THAN 1 ALTERNATIVE NUMBER, ENTER THE ONE HE/SHE CAN BE REACHED AT MOST OFTEN

PHONE: (______) ________________

N12. Do you have an email address? {IF YES} May I have it, please?

EMAIL ADDRESS (SPECIFY ________________________________)

NO
N13. We’d like the name and contact information for a relative, who does not live with you, but would always know how to reach you.

What is that person’s name, address, and telephone number? And what is that person’s relationship to you?

INTERVIEWER INSTRUCTION IF PERSON HAS NO RELATIVE: Could you give me the name and contact information for a friend who does not live with you, but would always know how to reach you?

INTERVIEWER NOTE: VERIFY SPREADING. ENCOURAGE R TO PROVIDE ALL REQUESTED INFORMATION

CONTACT PERSON #1:

NAME: __________________________________________
RELATIONSHIP: __________________________________
STREET ADDRESS/P.O. BOX: _________________________
CITY: ____________________________
STATE: ____________________________
ZIP: ____________________________
PHONE: ____________________________

N14. We’d like the name, address and telephone number of another relative or friend who would always know how to reach you if you moved? And what is that person’s relationship to you?

INTERVIEWER NOTE: THIS INFORMATION IS VERY IMPORTANT! ENCOURAGE R TO PROVIDE ADDITIONAL CONTACT PERSON. VERIFY SPANDING. ENCOURAGE R TO PROVIDE ALL REQUESTED INFORMATION

CONTACT PERSON #2:

NAME: __________________________________________
RELATIONSHIP: __________________________________
STREET ADDRESS/P.O. BOX: _________________________
CITY: ____________________________
STATE: ____________________________
Thank you very much for this information.

That’s the end of the interview. I’d like to thank you for the time and information you’ve provided. We will soon send you $40 for participating in this interview. Your opinions and experiences will help plan programs to benefit children in your community.

Again, many thanks.
Appendix C

Unit and Item Non-response
Unit Non-response

When a sample is drawn from a population for a survey, strict procedures are followed to maximize the likelihood that survey results will be representative of that population, except for variation that occurs by chance. A question arises, however, when less than all sample members complete the survey: Are respondents in some way different from those who did not participate in the survey? If they are different, results will not be completely representative of the larger population (although they could be close), unless an adjustment is made to address the non-response.

With decades of research findings, certain population characteristics are generally recognized as producing differences in respondents, so analysts are particularly careful to look for response bias in those areas. For a study such as SEED OK, most center on socioeconomic characteristics, such as race/ethnicity, income, age, and level of education. If respondents differ from non-respondents in these characteristics, the survey results may be biased as a result of non-response. Below, we discuss survey responders versus non-responders; treatment and control group members have been pooled for these analyses.

Baseline Non-response

The challenge in adjusting for non-response is that information is needed from both those who participated in the survey and those who did not. Because non-respondents, by definition, did not complete a survey, the ability to examine data for non-response bias can be quite limited. For SEED OK, we obtained several demographic indicators for the entire sample from the Oklahoma State Department of Health’s birth records. These include the age of the mothers and fathers, race, ethnicity, education, and the first three digits of the Zip code.

We constructed a generalized exponential model (GEM)\(^1\) to model non-response using variables from the birth registry. The results of this analysis showed 3 of the 17 Zip code areas (735, 736, and 741) are statistically significant. All of these areas had a likelihood of response; however, none were particularly strong. The only other factor that was significant was the mother’s ethnicity. Hispanic mothers had slightly higher odds of response than non-Hispanic mothers.

Follow-up Non-response (Attrition)

The non-response analysis at follow-up paralleled the analysis that was conducted at baseline to examine attrition between the baseline and follow-up surveys. The primary difference is that more data are available for non-response analysis. Previously, the non-response analysis was

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limited to data from the sampling frame (i.e., Oklahoma birth records); now, we can add information collected from baseline survey respondents to use in the model.

The follow-up response model showed that being older and having more education were significant predictors of response to the follow-up survey. In addition, when the focal child’s father was Hispanic, non-response was more likely. However, ethnicity of the child’s mother (the respondent in most cases) did not influence response.

**Item Non-response**

This section of the appendix gives additional results on item non-response for the outcomes used in Chapter 6. That analysis focused on the impact of SEED OK on saving behavior. All exhibits in that chapter were based on outcome data from samples composed of individuals who completed the follow-up interview and had no item non-response for the respective saving outcome. The respective sample sizes for each estimation and outcome are shown in parentheses in the left-most column of each exhibit in that chapter. For example, in Exhibit 6-1, a sample of 2,190 observations was used to generate the SEED OK treatment impact estimates on educational saving for the focal child in non-529 plan financial assets. These 2,190 cases represent respondents who both completed the follow-up interview and responded to the questions needed to construct this saving outcome.

The first row of Exhibit C-1 below illustrates the source of these 2,190 cases. Column 1 shows that 2,704 individuals completed the baseline interview. Of these individuals, 2,268 completed the entire follow-up interview (column 2), and 436 were attriters (column 3). The attriters are composed of two groups:

- A total of 29 began the follow-up interview, gave valid responses to the questions needed to construct this saving outcome, but failed to complete the interview in its entirety (column 6).
- The other 407 were not locatable, declined attempts to begin the follow-up interview, or otherwise did not complete the follow-up (column 8).

The group of 29 was not included in the analysis sample of 2,190, because even though they have non-missing data for the saving outcome, they did not complete the entire follow-up interview, and therefore are missing information on other measures used in the evaluation (e.g., covariates and other financial outcomes). That is, overall 2,219 cases had non-missing outcome data (column 4), but only 2,190 (individuals who completed the follow-up interview) were used in the estimation in Exhibit 6-1. The remaining rows in Exhibit C-1 similarly show the distribution of cases for the outcomes in Exhibits 6-6 and 6-7. The number of missings rises as the outcome becomes more aggregated. For example, 1,133 cases have missing values for net

---

2 As noted in the text, there was very little item non-response in all other parts of the survey, so no additional discussion about missing data for those survey items is necessary.
worth (the last row). This occurs because there are missing values in the various asset and
debt components to net worth, which quickly accumulate in the aggregated measure of net
worth. The overall result is a high proportion, around 42%, of missing values for net worth.

The key concern with missing values is that they may pose a threat to internal validity, which
occurs when such cases are not balanced between treatment and control groups, and
missingness is correlated with potential outcomes. Importantly, any potential bias is not a
function of the overall rate of missingness per se. That is, even if 42% of baseline families have
missing net worth at follow-up from either attrition or item non-response, the estimates in
Exhibit 6-7 will still be unbiased estimates of SEED treatment effects as long as missings are
balanced between treatment and control groups and are not correlated with potential
outcomes.

In Exhibit C-1, the total number of cases with missing values for an outcome is the sum of the
number of attriters (column 3) and the number of cases with completed follow-up interviews
but with item non-response on the outcome (column 9). For example, in the first row, the sum
of columns 3 and 9 is 514, so 514 cases have missing values for financial assets for the focal
child’s education. This number also appears in column 2 of Exhibit C-2. This exhibit examines
the extent to which missing cases are differentially located in the treatment and control groups.
Column 3 shows the percent of missings for the treatment group for each of the outcomes in
Exhibit C-1. For example, in row 1, 18.1% of baseline families in the treatment group had
missing values for financial assets for the focal child (column 3). The similar figure was 19% for
control group families (column 4). If missings are balanced, the incidence of missing values
should be equal across the two groups. This is tested in column 5, which shows the difference
in the percent missing (column 3 – column 4), along with the p-value in brackets for a two-
tailed test of the null hypothesis that this incidence is the same for both groups (balanced),
versus the alternative hypothesis that the incidence is different (unbalanced). Looking down
rows in column 5, the differences in the rate of missing values between the treatment and
control groups for the 6 outcomes, although consistently negative, are small in magnitude and
not statistically different from zero at the 5% level of significance. This suggests that the
incidence of missing values is balanced between the treatment and control groups.

Exhibit C-3 examines the extent to which missing values are related to potential outcomes. By
definition, potential outcomes are not observed. In their place, the exhibit uses two measures
of saving available at baseline. The first is the amount accumulated in 529 plans prior to the
SEED intervention (columns 1–4). These pre-SEED balances are drawn from TIAA-CREF
administrative data. The second is the amount saved for the focal child for any purpose, as self-
reported in the baseline survey (columns 5–8). Columns 2 and 3 show the mean pre-SEED 529
balances for cases with missing values for the respective outcome. Column 4 shows the

---

3 Some of these cases are missing due to item non-response in the baseline survey. The incidence of these missings
(not shown) was balanced between treatment and control groups.
difference between treatment and control group means, with the p-value in brackets for a two-tailed test of the null hypothesis that 529 accumulation was the same for both groups (balanced in potential outcomes), versus the alternative hypothesis that 529 accumulation was different (unbalanced in potential outcomes). Across outcomes, these differences between the groups were small and not statistically different from zero at the 5% level of significance. The findings are similar for the broader self-reported measure of baseline saving in column 8. Overall, these results suggest that missing values were not correlated with potential outcomes.

In summary, there is little to no evidence to suggest that missing values in the outcome variables in Chapter 6 resulted in threats to the internal validity of the SEED OK experiment. To assess the extent to which missing values reduced the precision of the estimates in that chapter, we did the following calculation. For missing values in the treatment and control groups, we assigned the group mean to missing values in the respective group and then re-estimated the treatment effect in Chapter 6. This form of imputation yields the same treatment effects (by construction), but results in an increase in precision (i.e., a reduction in standard errors) by both reducing the standard deviation of the outcome and increasing the sample size. Upon imputation, none of the impact estimates shown in Exhibits 6-1, 6-4, 6-6, and 6-7 that were statistically insignificant gained significance. Therefore, there was no evidence that missing values were the root cause of any inability to detect statistically significant conclusions about SEED impacts in the evaluation.
### Exhibit C-1. Number of Missing Values for Non-Financial Assets, Debt, and Net Worth at the End of the Experiment

<table>
<thead>
<tr>
<th>Outcome</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
<th>(7)</th>
<th>(8)</th>
<th>(9)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Non-Missing Cases by Reason</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of Completed Baseline Interviews</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of Completed Follow-up Interviews [=(5)+(9)]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of Attriters [=(6)+(8)]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total [=(5)+(6)]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Completed Follow-up Interview</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Item Response, but Did Not Complete Follow-up Interview</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total [=(8)+(9)]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not Locatable, Refused, or Did Not Complete Follow-Up Interview</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Completed Follow-Up Interview, but with Item Non-response</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **Financial assets for focal child's education, excluding 529 plan assets**
  - Number of Completed Baseline Interviews: 2,704
  - Number of Completed Follow-up Interviews: 2,268
  - Number of Attriters: 436
  - Total: 2,219
  - Completed Follow-up Interview: 2,190
  - Item Response, but Did Not Complete Follow-up Interview: 29
  - Total: 485
  - Not Locatable, Refused, or Did Not Complete Follow-Up Interview: 407
  - Completed Follow-Up Interview, but with Item Non-response: 78

- **All financial assets, excluding 529 plan assets**
  - Number of Completed Baseline Interviews: 2,704
  - Number of Completed Follow-up Interviews: 2,268
  - Number of Attriters: 436
  - Total: 1,937
  - Completed Follow-up Interview: 1,912
  - Item Response, but Did Not Complete Follow-up Interview: 25
  - Total: 767
  - Not Locatable, Refused, or Did Not Complete Follow-Up Interview: 411
  - Completed Follow-Up Interview, but with Item Non-response: 356

- **Non-financial non-housing assets**
  - Number of Completed Baseline Interviews: 2,704
  - Number of Completed Follow-up Interviews: 2,268
  - Number of Attriters: 436
  - Total: 2,019
  - Completed Follow-up Interview: 1,994
  - Item Response, but Did Not Complete Follow-up Interview: 25
  - Total: 685
  - Not Locatable, Refused, or Did Not Complete Follow-Up Interview: 411
  - Completed Follow-Up Interview, but with Item Non-response: 274

- **Non-housing debt**
  - Number of Completed Baseline Interviews: 2,704
  - Number of Completed Follow-up Interviews: 2,268
  - Number of Attriters: 436
  - Total: 2,057
  - Completed Follow-up Interview: 2,033
  - Item Response, but Did Not Complete Follow-up Interview: 24
  - Total: 647
  - Not Locatable, Refused, or Did Not Complete Follow-Up Interview: 412
  - Completed Follow-Up Interview, but with Item Non-response: 235

- **Housing equity**
  - Number of Completed Baseline Interviews: 2,704
  - Number of Completed Follow-up Interviews: 2,268
  - Number of Attriters: 436
  - Total: 2,177
  - Completed Follow-up Interview: 2,142
  - Item Response, but Did Not Complete Follow-up Interview: 35
  - Total: 527
  - Not Locatable, Refused, or Did Not Complete Follow-Up Interview: 401
  - Completed Follow-Up Interview, but with Item Non-response: 126

- **Net worth**
  - Number of Completed Baseline Interviews: 2,704
  - Number of Completed Follow-up Interviews: 2,268
  - Number of Attriters: 436
  - Total: 1,571
  - Completed Follow-up Interview: 1,553
  - Item Response, but Did Not Complete Follow-up Interview: 18
  - Total: 1,133
  - Not Locatable, Refused, or Did Not Complete Follow-Up Interview: 418
  - Completed Follow-Up Interview, but with Item Non-response: 715
### Exhibit C-2. Incidence of Missing Values for Non-Financial Assets, Debt, and Net Worth at the End of the Experiment, for the Treatment and Control Groups, Respectively [p-value]

<table>
<thead>
<tr>
<th>Outcome</th>
<th>(1) Number of Completed Baseline Interviews</th>
<th>(2) Total Number of Missing Cases</th>
<th>(3) % of Baseline Missing at Follow-up, Any Reason, Treatment</th>
<th>(4) % of Baseline Missing at Follow-up, Any Reason, Control</th>
<th>(5) Difference (Treatment-Control)</th>
</tr>
</thead>
<tbody>
<tr>
<td>financial assets for focal child’s education, excluding 529 plan assets</td>
<td>2,704</td>
<td>514</td>
<td>18.1</td>
<td>19.0</td>
<td>−0.8 [0.61]</td>
</tr>
<tr>
<td>all financial assets, excluding 529 plan assets</td>
<td>2,704</td>
<td>792</td>
<td>28.4</td>
<td>31.1</td>
<td>−2.7 [0.17]</td>
</tr>
<tr>
<td>non-financial non-housing assets</td>
<td>2,704</td>
<td>710</td>
<td>25.3</td>
<td>25.6</td>
<td>−0.3 [0.88]</td>
</tr>
<tr>
<td>non-housing debt</td>
<td>2,704</td>
<td>671</td>
<td>24.0</td>
<td>25.4</td>
<td>−1.3 [0.47]</td>
</tr>
<tr>
<td>housing equity</td>
<td>2,704</td>
<td>562</td>
<td>19.0</td>
<td>21.6</td>
<td>−2.6 [0.14]</td>
</tr>
<tr>
<td>net worth</td>
<td>2,704</td>
<td>1,151</td>
<td>41.5</td>
<td>43.6</td>
<td>−2.0 [0.34]</td>
</tr>
</tbody>
</table>
### Exhibit C-3. Average Saving for the Focal Child at Baseline for Cases with Missing Values for Non-Financial Assets, Debt, and Net Worth at the End of the Experiment, for the Treatment and Control Groups, Respectively [p-value]

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Pre-SEED Balances in OK 529 Plans</th>
<th>Amount Saved for Focal Child for Any Purpose at Baseline</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1) total cases mean for treatment group</td>
<td>(2) mean for control group (T-C) difference</td>
</tr>
<tr>
<td>financial assets for focal child’s education, excluding 529 plan assets</td>
<td>514 39</td>
<td>19 20 [0.62]</td>
</tr>
<tr>
<td>all financial assets, excluding 529 plan assets</td>
<td>792 35</td>
<td>28 7 [0.62]</td>
</tr>
<tr>
<td>non-financial non-housing assets</td>
<td>710 8</td>
<td>21 −13 [0.33]</td>
</tr>
<tr>
<td>non-housing debt</td>
<td>671 5</td>
<td>15 −10 [0.43]</td>
</tr>
<tr>
<td>housing equity</td>
<td>562 37</td>
<td>17 20 [0.60]</td>
</tr>
<tr>
<td>net worth</td>
<td>1,151 29</td>
<td>24 5 [0.82]</td>
</tr>
</tbody>
</table>
Weighting

The survey data were weighted in three steps:

1. An initial sampling weight was created based on the probability that a sample member was selected.
2. A Generalized Exponential Model (GEM) was applied to account for any discrepancies between respondents and non-respondents.
3. The weights were post-stratified to the total universe of births in Oklahoma in 2007 by using a raking algorithm.

A GEM was used to construct response propensity weights to account for factors related to non-response. This GEM is a unified approach to non-response adjustment, poststratification, and extreme weight reduction, based on a generalization of Deville and Särndal’s logit model. The GEM approach controls at the margins (subgroup totals), and adjustment factors can be constrained individually. Although other statistical techniques can be used for making adjustments due to non-response bias, we use GEM because it provides a formal, robust, and efficient method for constructing statistical weights. GEM empirically determines which factors are related to non-response and uses those in the model for adjustment. GEM essentially introduces objectivity into the process of selecting relevant weighting variables and applying them in the adjustment.


Appendix D
Controlling for Baseline Characteristics
Financial Results

This appendix gives analytical results that control for baseline differences between treatment and control group members, beginning with data presented in selected exhibits in Chapters 4 through 6. The results in these chapters are simple comparisons of outcomes between the two groups. Such comparisons can be interpreted as causal impacts of SEED as long as randomization of treatment status was correctly implemented after the baseline interview and as long as there was no differential attrition based on treatment status at follow-up. The analysis in Chapter 2 suggested no such randomization and attrition biases. For both completeness and for the interested reader, this appendix presents regression-adjusted treatment effects conditional on baseline characteristics.

Overall, these results are highly similar to the unadjusted comparisons in Chapters 4 through 6. For example, Exhibit D-1 shows the incidence of 529 accounts for focal children in the treatment and control groups. The first row shows the unadjusted treatment effect estimates (identical to those in the third row of Exhibit 4-1 in Chapter 4). The second row shows the treatment effect estimates adjusted for any differences in baseline characteristics between the two groups, based on the following statistical model:

\[ D_i = \alpha + \delta T_i + \gamma X_i + u_i, \]

where the outcome, \( D \), is an indicator variable that takes on a value of 1 if the family has an account for the focal child and zero otherwise, the subscript \( i \) indexes the family, and \( u \) is the disturbance term. The vector of variables \( X \) is drawn from the baseline survey: mother’s age, education (high school diploma, some college, college degree, more than college), race/ethnicity (African American, American Indian, Hispanic), marital status (married, widowed or divorced), number of children, income, employment, health insurance coverage, homeownership, plus ownership of a credit card, a bank account, and federal and Oklahoma tax filing status.

The parameter, \( \delta \), associated with the randomly assigned treatment status indicator, \( T \) (1 if in the treatment group, 0 if in the control group), represents the impact of SEED OK on the incidence of participant-owned accounts, controlling for baseline socioeconomic characteristics \( (X) \). Any baseline differences between the groups not balanced by randomization will be accounted for by these control variables. The addition of the controls also may improve the precision of the causal impact estimates. The adjusted estimates and standard errors were calculated using ordinary least squares (OLS) estimation.
Exhibit A4-1. Comparison of Unadjusted and Regression-Adjusted SEED Treatment Effects on Percent of 529 Plan Ownership for the Focal Child (in Percent), by Type of Account, (Standard Errors in Parentheses)

<table>
<thead>
<tr>
<th>Sample</th>
<th>Have 529 Account (n = 2,704)</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Private Account</td>
<td>Other-owned Account</td>
<td>Total: Any Private Account</td>
<td>Any Account (state -, participant-, or other-owned)</td>
<td></td>
</tr>
<tr>
<td>unadjusted difference</td>
<td>Participant-owned Account</td>
<td>15.1</td>
<td>0.4</td>
<td>14.6</td>
<td>97.5</td>
</tr>
<tr>
<td></td>
<td>(1.1)</td>
<td>(0.6)</td>
<td>(1.2)</td>
<td>(0.5)</td>
<td></td>
</tr>
<tr>
<td>regression-adjusted difference</td>
<td>Participant-owned Account</td>
<td>14.8</td>
<td>0.4</td>
<td>14.3</td>
<td>97.4</td>
</tr>
<tr>
<td></td>
<td>(1.1)</td>
<td>(0.6)</td>
<td>(1.1)</td>
<td>(0.5)</td>
<td></td>
</tr>
</tbody>
</table>

In the second row, accounting for any differences between groups in socioeconomic characteristics at baseline, the difference in participant-owned accounts was 14.8 percentage points. This is nearly identical to the unadjusted difference in the first row. Of course, this would be expected if the treatment and control groups were balanced in terms of observable characteristics at the time of randomization. In addition, the standard errors are nearly identical, suggesting very limited gains in precision from adding control variables to the estimation.

Exhibit A5-1 presents OLS regression-adjusted results for plan balances as the outcome, using the same control variables (X) as above, and is comparable to Exhibit 5-1 in the report. Again, the unadjusted and adjusted estimates are nearly identical, and there was little gain in precision from adding the baseline controls.

Exhibit A5-1. Comparison of Unadjusted and Regression-Adjusted 529 Plan Balances for the Focal Child, by Type of Account, (Standard Errors in Parentheses)

<table>
<thead>
<tr>
<th>Sample</th>
<th>End of Experiment Plan Balance in...</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Participant-owned Account</td>
<td>Other-owned Account</td>
<td>Total: Any Private Account</td>
<td>Any Account (state -, participant-, or other-owned)</td>
<td></td>
</tr>
<tr>
<td>unadjusted difference</td>
<td>$127</td>
<td>-$58</td>
<td>$70</td>
<td>$1,106</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(34)</td>
<td>(45)</td>
<td>(57)</td>
<td>(57)</td>
<td></td>
</tr>
<tr>
<td>regression-adjusted difference</td>
<td>$120</td>
<td>-$62</td>
<td>$58</td>
<td>$1,095</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(30)</td>
<td>(45)</td>
<td>(53)</td>
<td>(53)</td>
<td></td>
</tr>
</tbody>
</table>

Exhibits A5-2, A5-3, A6-2, and A6-5 show the regression-adjusted quantile treatment effects for Exhibits 5-2, 5-3, 6-2, and 6-5, respectively. These quantile treatment effects...
(QTEs) were calculated using the ordinary quantile regression (OQR) estimator based on the following statistical model:

\[ Y_q = \alpha^q + \delta^q T + \theta^q \hat{P} + u_i, \]

where the superscript \( q \) indexes the percentile of the distribution. In (0.2), \( \delta^q \) is the treatment versus control group difference in the asset outcome (the treatment effect) at the \( q \)th percentile. So, for example, in Exhibit A5-2, \( \delta^{90} \) is the treatment effect at the 90th percentile of 529 assets in participant-owned accounts.

Because most saving in SEED OK participant-owned accounts is done by a relatively small fraction of families, the treatment effects in these appendix figures were estimated only for the top 20% of the distribution, i.e., \( q = 80, ..., 99 \). To calculate these treatment effects, the model was estimated separately for each quantile to yield \( \hat{\delta}^q \), the estimated quantile treatment effects. To adjust for potential differences across families in baseline characteristics (\( X \)) that might be correlated with treatment status, estimation of the treatment effect in (0.2) is conditional on the propensity score (\( P \)). The propensity score is a summary measure of all of the aspects of treatment status that happen to be correlated with observed characteristics at baseline. The estimated propensity score for each family, \( \hat{P} \), is the predicted probability from the estimation of the following auxiliary statistical model using probit maximum likelihood:

\[ T_i = \kappa + \xi X_i + \epsilon_i. \]

Then the estimated propensity score is entered into the right-hand side of the QTE model in (0.2) to serve the same purpose as control variables in a linear regression model: it adjusts the treatment effect estimates for observed baseline differences in socioeconomic and saving characteristics that might be correlated with treatment status.

The primary advantage of conditioning on the estimated propensity score is to better ensure the convergence of the OQR estimates. Unlike OLS regression, quantile regression can fail to converge when covariates such as \( X \) are entered directly linearly and there are many covariates. The greater the number of covariates, the thinner the cells with which to estimate quantile effects, especially in the tails of the distribution (where most educational saving in this sample lies). Technically, estimation conditional on the propensity score reduces the dimensionality of the conditioning vector to 1 and results in much better convergence.

The blue line shows the estimated QTEs for each percentile above the 80th, conditioning on the propensity score. The red lines mark the boundaries of the 95% confidence intervals, based on 769 bootstrapped replications. The propensity score was re-estimated with each replication sample.

A comparison of the adjusted QTEs in Exhibits A5-2, A5-3, A6-2, and A6-5 with their respective unadjusted counterparts in chapters 5 and 6 show that the unadjusted treatment effects continue to hold when baseline characteristics are added as covariates. Overall,
adjusting for baseline differences between the treatment and control groups does not have an important impact on the magnitude or precision of the SEED impact estimates for financial outcomes.
Exhibit A5-2. Quantile Treatment Effects for Participant-Owned 529 Assets for the Focal Child

Exhibit A5-3. Quantile Treatment Effects for State- and Privately-Owned 529 Assets for the Focal Child
Exhibit A6-2. Quantile Treatment Effects for Educational Saving for the Focal Child in Non-529 Forms

Exhibit A6-5. Quantile Treatment Effects for Educational Saving for Non-Focal Children
Next, we turn to the crowd-out estimates in Exhibit 6-3 in Chapter 6, which are based on the following statistical model:

\( Y_i = \mu^q + \beta^q B_i + v_i, \)

where the outcome, \( Y \), is educational saving for the focal child in non-529 forms at follow-up, the subscript \( i \) indexes the family, the superscript \( q \) indexes the quantile of the educational saving distribution, and \( v \) is the disturbance term. The explanatory variable is \( B \), which is the sum of all SEED plan balances across all accounts at follow-up for the focal child in the administrative data—it is the same measure as in the last column in Exhibit 5-1. The associated parameter, \( \beta \), measures crowd-out: the impact of an additional SEED dollar on educational saving in other forms. If \( \beta = 0 \), then SEED does not supplant other educational saving for the focal child; if \( \beta = -1 \), then SEED fully supplants other educational saving for the focal child. The parameters in equation (0.4) are estimated for each quantile \( q \) using the instrumental variable quantile regression, in which the randomly assigned treatment status indicator, \( T \) (1 if in the treatment group, 0 if in the control group), is used as the instrument for \( B \). The 95% confidence intervals in Exhibit 6-3 are based on 769 bootstrap replications, the same as in Exhibits 6-2 and 6-3, respectively.

**Psychosocial Results**

This section of the appendix includes analyses that include background characteristics (i.e., race/ethnicity, education, marital status, employment status, and number of children), and indicators of financial status (i.e., income, bank account ownership, home ownership, credit card possession, and financial assets). Analyses with adjustment for baseline measures for those areas for which data were collected at baseline are also included (depression, future orientation, and parental attitudes). To accomplish this, we conducted analysis of covariance using baseline data as covariates. Finally, analyses were done with both adjustment for baseline measures and background characteristics for the same three areas.

These ANCOVA models (for both the full sample and for race/ethnicity subgroup samples) were run to address any lingering concerns about group differences at baseline. By controlling for background characteristics and baseline measures, any differences between the treatment and the comparison caregivers can be attributed to SEED OK.

As may be seen in the tables, there are no significant differences between treatment and control in any construct for either the full sample or any subgroup with demographics and baseline measures adjusted.
## Treatment Effects for Unadjusted Follow-up Measures Model

<table>
<thead>
<tr>
<th>Group</th>
<th>Coefficient</th>
<th>S.E.</th>
<th>Test Stat.</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>depression</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>full sample</td>
<td>-0.067</td>
<td>0.044</td>
<td>-1.508</td>
<td>0.132</td>
</tr>
<tr>
<td>African American</td>
<td>-0.030</td>
<td>0.103</td>
<td>-0.288</td>
<td>0.774</td>
</tr>
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### Treatment Effects for Follow-up Measures Model, Adjusted for Demographic Covariates and Baseline Measures

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Appendix E

Analytical Methods for Psychosocial Analyses
Structural Equation Models

Earlier, we discussed the justification for using structural equation modeling (SEM) in the analysis of psychosocial outcomes. Below we provide additional details describing this method for those who are interested. The chief aim of this method is to account for measurement error and to estimate unobserved variables for the psychosocial outcome analysis.

Each SEM consists of a:

**measurement model** to determine how each observed indicator variable relates to the latent constructs of interest (future orientation, providing educational assets in the home, parenting attitudes, and mother’s well-being); and

**latent variable model** (sometimes called a structural model) consisting of the particular regression relationships between the construct of interest and the treatment assignment indicator, and optionally the other covariates for the adjusted treatment effect model, in order to test the effects of the treatment and covariates on the latent variables.

The most common measurement model used in social science research is factor analysis, which we use in this study first as a pure measurement model\(^1\) to verify that a set of survey items statistically fit with each other, and then subsequently incorporate into the SEM, allowing statistical tests of the relationship between these latent variables (estimated by the measurement model) and other variables of interest. These estimated latent variables form the outcome variables in these analyses (and also serve as baseline outcome measurement covariates in the baseline-adjusted models).

In our analyses, the structural model is a linear regression, much like an ordinary linear regression, used to test whether treatment vs. control group membership had any effect on psychosocial outcomes. What is different from ordinary regression is that the outcome in these models is not an observed variable, but is the latent variable estimated by the measurement model. What constitutes an SEM is that the structural and measurement models are estimated simultaneously.

Initially, SEM used only continuous observed variables, but additional research developed ways to use ordered categorical outcomes and other types of variables.\(^2\) All SEED OK psychosocial outcomes analyzed for the impact evaluation are either ordered categorical or binary, so we use Mplus software for the analysis.\(^3\)

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\(^1\) This first step involved some careful assessment of how well the measurement model fit the data and often involved making some adjustments including collapsing response categories, combining items, and excluding items that did not seem to fit the measurement model well. It is important to do this step well because if the basic bare measurement model for each latent construct is not acceptable in terms of fitting the data, then the tests built on their estimates implied by the model will not be of use.


We estimate a model by fitting it to the observed indicator variable data along with other analysis variables, allowing us to estimate both the level(s) of the latent construct(s) as well as estimating the relationship(s) to other variables. In this analysis, we fit a separate structural equation model for each individual psychosocial outcome to determine whether either unadjusted or adjusted treatment effects were statistically significant.

**Significance Testing**

Individual independent variables, such as the treatment effect, are tested by first fitting a model with that independent variable of interest in the model and then fitting it again without that variable in the model. A model difference test determines whether the fit of the model is significantly worsened by removing the effect of that variable from the model. If the fit is significantly worse with the constraint, then the fits are considered statistically different and that coefficient must be included to fit the data. In other words, the data indicate that when we account for membership in different treatment groups, the model fits the data better, so there must be a difference in the modeled outcome between the two treatment groups. Thus, we answered each of the study’s primary research questions by examining the difference in model fit of nested models. All latent variable modeling was conducted using Mplus (version 6.12) and the analysis included sampling weights and the stratification present in the sampling design.

Additional significance testing is provided by a z-test for the treatment assignment coefficient in the model. This tests whether the treatment effect is different from zero. In all cases, these tests were confirmed by nested likelihood ratio tests. In all cases, there was no discrepancy between the two tests regarding significance.

**Model Fit**

Before conducting the main statistical tests, the fit of the unconstrained model must first be established. It is important to establish decent model fit before proceeding with tests of model constraints that are sensitive to loss of fit. If the unconstrained model does not fit well, it does not mean much to find that additional constraint makes it fit even worse. When unconstrained model fit is poor, it is often because the model is missing relationships to account for correlations between variables. In general, we were able to make adjustments, often adding correlational relationships, resulting in models that fit reasonably well.

Table E-1 contains information on the fit of various models for a suggested set of fit statistics. These are fits for models to the full sample data. The reader can see that, in general, the fit is good. Generally, only the weighted root mean squared residual (WRMR)

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4 This can be fit by constraining the effect of that variable to be zero in the model.
5 The two groups that are being compared are the SEED treatment group and the control group.
6 Hu and Bentler, 1999; MacCallum et.al., 1996; Yu and Muthén, 2001.
and Tucker Lewis index (TLI) statistics for the adjusted treatment effect models exceeded suggested criteria for good model fit, with the model for home educational assets having the most extreme indication of poor fit. The root mean squared estimate of approximation (RMSEA) statistics remains good, however, and the decline in the TLI is expected with models with more variables and is not a concern if the RMSEA values remain good.

A primary cause for this analysis is to determine the adequacy of the model for accounting for the data; a secondary cause may be to determine how much of the variance in the indicators is attributable to the model’s latent variable. Here the results were less satisfying.

For the CES-D the latent variable accounted for between 56 and 78% of the individual indicator’s variances.

For the LOT-R, the range is from 2 to 63%, with four of the six greater than 21%.

For future orientation, the range is from 20 to 57% with two of the four greater than 32%.

For home educational assets, the range is from 14 to 85% with two of the three greater than 27%.

For parental attitudes, the range is from 3 to 65% with two of the four greater than 52%.

While not all of these measurement models are highly adequate, most seem to be doing a reasonably good job with this kind of highly variable data. Half or more of the items have strong relationships to the latent variable in the CES-D, LOT-R, future orientation and parental attitudes models. The home educational assets model is not without some merit given the strength of the number of books in the home item. What hurts this construct is the lack of variance between items that measure having a computer in the home and having Internet access.

When looking at the model R-square values for all five outcomes, the amount of variance in the latent variable predicted by the treatment assignment alone when rounding to two decimal places was zero (CES-D was .002 and future orientation was .001). This is not surprising since there were no significant treatment effects in the unadjusted full sample models. For the adjusted models, the variance predicted for CES-D was 4.9%, for future orientation was 31.1%, for home educational assets was 70.7%, for parental attitudes was 7.1%, and for the LOT-R was 27.7%. Again, this is not surprising given the effects we would expect for some of the background variables (educational attainment, marital status, employment status, and income level of caregiver) on these outcomes.

Exhibit E-1. Full Sample Model Fit Statistics

<table>
<thead>
<tr>
<th>CES-D Items</th>
<th>Future Orientation Items</th>
<th>Home Educational Assets Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fit Statistic</td>
<td>Parental Attitudes Items</td>
<td>LOT-R Items</td>
</tr>
<tr>
<td>---------------</td>
<td>--------------------------</td>
<td>-------------</td>
</tr>
<tr>
<td></td>
<td>unadjusted treatment effect</td>
<td>adjusted treatment effect</td>
</tr>
<tr>
<td>RMSEA⁷</td>
<td>0.020</td>
<td>0.009</td>
</tr>
<tr>
<td>90% C.I.⁸</td>
<td>0.000, 0.037</td>
<td>0.000, 0.017</td>
</tr>
<tr>
<td>Close Fit⁹</td>
<td>0.999</td>
<td>1.000</td>
</tr>
<tr>
<td>TLI¹⁰</td>
<td>0.998</td>
<td>0.996</td>
</tr>
<tr>
<td>WRMR¹¹</td>
<td>0.767</td>
<td>0.676</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fit Statistic</th>
<th>Parental Attitudes Items</th>
<th>LOT-R Items</th>
<th>Ages and Stages Items</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>unadjusted treatment effect</td>
<td>adjusted treatment effect</td>
<td>unadjusted treatment effect</td>
</tr>
<tr>
<td>RMSEA</td>
<td>0.011</td>
<td>0.024</td>
<td>0.009</td>
</tr>
<tr>
<td>90% C.I.</td>
<td>0.000, 0.033</td>
<td>0.018, 0.029</td>
<td>0.000, 0.018</td>
</tr>
<tr>
<td>Close Fit</td>
<td>1.000</td>
<td>1.000</td>
<td>1.000</td>
</tr>
<tr>
<td>TLI</td>
<td>0.995</td>
<td>0.819</td>
<td>0.997</td>
</tr>
<tr>
<td>WRMR</td>
<td>0.638</td>
<td>1.183</td>
<td>0.586</td>
</tr>
</tbody>
</table>

⁷ Root mean squared estimate of approximation.
⁸ 90% confidence interval for the RMSEA estimate.
⁹ P-value for the test of close fit, testing whether RSMEA < .05. Large probabilities (> .10) are good. Note this test fails for perfect fit where RMSEA is exactly zero as is the case in the base measurement model for home educational assets.
¹⁰ Tucker Lewis index.
¹¹ Weighted root mean squared residual.
**Collapsed Response Categories and Items Not Retained**

**Exhibit E-2: Collapsed Response Categories Due to Insufficient Cell Sizes**

<table>
<thead>
<tr>
<th>Item</th>
<th>Response Category Removed</th>
<th>Response Category with Which It Was Combined</th>
</tr>
</thead>
<tbody>
<tr>
<td>attitudes about parenting H1</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>attitudes about parenting H1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>attitudes about parenting H2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>attitudes about parenting H2</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>attitudes about parenting H3</td>
<td>4,3</td>
<td>2</td>
</tr>
<tr>
<td>attitudes about parenting H4</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>attitudes about parenting H4</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>future expectations H11*</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>future expectations H12</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>future expectations H13</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>future expectations H15</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>future expectations M3*</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>CES-D G7</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>CES-D G8</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>CES-D G9</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>CES-D G10</td>
<td>4</td>
<td>3</td>
</tr>
</tbody>
</table>

*Item not used in final model.

**Exhibit E-3: Ages and Stages Scales and Items Not Included in the SEM Analysis**

<table>
<thead>
<tr>
<th>Scale</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>interaction</td>
<td>I1, I3, I6, I14, I15, I16</td>
</tr>
<tr>
<td>self-regulation</td>
<td>I8, I11</td>
</tr>
</tbody>
</table>

**Additional Considerations**

In conducting an evaluation like SEED OK, analysts frequently face decisions that require considering advantages and disadvantages of various approaches in light of the research design. Below, we present questions and answers to help interested readers understand our decisions.

**Q:** Why did the SEED OK evaluation not use all items on a given scale?

**A:** Generally speaking, analysts would prefer to use scales intact and as originally designed, but often other considerations make that impossible and instead the analysts must choose to use reduced scales and individual items. For SEED OK, one consideration is that we were collecting data through a telephone interview, which means the amount of time to pose questions and receive answers is necessarily constrained, and the psychosocial measures represented only one of several domains that had to be covered during the interview. Thus, we had to choose between (1) including a psychosocial scale/measure that could be administered in its original form or (2) selecting parts of different measures. In consultation with the Research Advisory Council (RAC), we elected to choose indicators that covered several topical areas, such as parental depression and child development, rather than entire...
scales that would have covered perhaps a single topical area. This decision meant that we could not use the original scaling.

**Q: Why not use standardized scores?**

A: SEED OK did not use the full set of items from any single scale, which meant there was no possible way to use standardized scores. Our solution was to use SEM procedures, which allowed for the estimation of the latent variables represented by the individual items, simultaneously estimating their measurement error. This approach provided a superior measurement approach to standardized scores with the same items because it included an estimate of the measurement error in the individual items. We supplemented this with the analyses of the individual items.

**Q: Why were the subscales on the Ages and Stages not used as designed?**

A: Although the ASQ:SE has different item clusters, it has no standardized subscales. The authors provide only an overall standardized score using all 33 items that is to be used to determine a cut score. We elected to use a subset of items that have been found in previous research to be important for future behavioral development, school achievement, and adult success.

**Q: What is the justification for using the latent variables “educational assets in the home” and “orientation toward the future” that have not been used in previous studies?**

A: The latent variables cover two constructs that the RAC identified as important (and had also been included in the Michigan SEED impact evaluation). There are no known scales that cover these two constructs, which is why the individual items measuring these two constructs were created (or taken from other measures). The SEM analyses permitted an overall test of these two constructs. In addition to the SEM, we analyzed the individual items. The two types of analyses provide comparable results.

**Q: Why use latent variables in the SEM since they have no unit of measurement, which makes it difficult to interpret the results, compare the results to those of other studies using these measures, or discuss practical implications?**

A: The SEM results do have a unit of measurement, the standard deviation. This is interpretable, perhaps more so than standardized scores, because it provides measurement in the context of the population distribution. However, we also provide individual item analyses and have interpreted what the responses say about the attitudes and practices of the sample.

**Q: Why are outcome measures not controlled for baseline differences in the analyses?**

A: Because of random assignment, there should be no need to control for baseline differences, and our analyses of differences between treatment and control group members at baseline confirm this. Nonetheless, we performed an adjusted analysis controlling for measures collected at baseline and present them in Appendix D. As stated in the report, there were no significant differences between treatment and control groups in any construct for either the full sample or any subgroup with demographics and baseline measures adjusted.
Q: *Why choose to measure statistical significance at p < .05? Why use the Bonferroni correction?*

A: Given the very large number of statistical tests conducted (See Exhibit E-4), we use the conventional indicator of statistical significance, namely the measured outcome has less than a 5 in 100 chance of occurring at random. Because multiple tests were conducted for a given outcome across subgroups and using both adjusted and unadjusted models, this introduced the opportunity for spurious results to be found due to multiple significance tests. We introduced a correction to minimize the chance of spurious results, using a Bonferroni correction for the overall test and tests for four subgroups for the six outcomes (i.e., optimism, depression, parental attitudes, educational assets, future orientation, and behavior) resulting in a corrected significance level of .01 for each outcome, providing an overall significance level of .05. While controlling for Type 1 error using a Bonferroni correction can increase Type 2 error, the correction we used was modest. In fact, we did not strictly control for all the tests that we ran (see Exhibit E-4) and we did not include the tests of individual items within each outcome domain. Thus, we do not believe that we unduly increased Type 2 error at the expense of controlling Type 1 error. Moreover, we did not use a Bonferroni correction for our significance tests on individual items, and the result is unchanged; namely, we found few differences between treatment and control groups.

We also provide p-values so the reader is free to use a different significance level if desired.

**Exhibit E-4. Number of Statistical Tests for Outcome Measures**

<table>
<thead>
<tr>
<th>Outcome Measure</th>
<th>Number of Tests of Statistical Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parental well-being — optimism (LOT-R)</td>
<td>10</td>
</tr>
<tr>
<td>Parental well-being — depression (CES-D)</td>
<td>20</td>
</tr>
<tr>
<td>Attitudes about parenting</td>
<td>20</td>
</tr>
<tr>
<td>Home educational assets</td>
<td>10</td>
</tr>
<tr>
<td>Future orientation</td>
<td>20</td>
</tr>
<tr>
<td>Child behavior (Ages and Stages)</td>
<td>10</td>
</tr>
</tbody>
</table>
Appendix F

Impact of 529 Accounts on Psychosocial Outcomes
### Exhibit F-1. Optimism Indicators for Respondents with and without Their Own 529 Account

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Have Own 529 Account</th>
<th>Response</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>In uncertain times, I usually expect the best.</td>
<td>yes</td>
<td>Agree</td>
<td>81.55</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Neither Agree nor Disagree</td>
<td>12.62</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Disagree</td>
<td>5.83</td>
</tr>
<tr>
<td></td>
<td>no</td>
<td>Agree</td>
<td>81.78</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Neither Agree nor Disagree</td>
<td>11.07</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Disagree</td>
<td>7.14</td>
</tr>
<tr>
<td>If something can go wrong for me, it will.</td>
<td>yes</td>
<td>Agree</td>
<td>14.63</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Neither Agree nor Disagree</td>
<td>19.02</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Disagree</td>
<td>66.34</td>
</tr>
<tr>
<td></td>
<td>no</td>
<td>Agree</td>
<td>27.37</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Neither Agree nor Disagree</td>
<td>20.38</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Disagree</td>
<td>52.25</td>
</tr>
<tr>
<td>I'm always optimistic about my future.</td>
<td>yes</td>
<td>Agree</td>
<td>76.10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Neither Agree nor Disagree</td>
<td>15.12</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Disagree</td>
<td>8.78</td>
</tr>
<tr>
<td></td>
<td>no</td>
<td>Agree</td>
<td>80.24</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Neither Agree nor Disagree</td>
<td>11.08</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Disagree</td>
<td>8.68</td>
</tr>
<tr>
<td>I hardly ever expect things to go my way.</td>
<td>yes</td>
<td>Agree</td>
<td>5.83</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Neither Agree nor Disagree</td>
<td>11.65</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Disagree</td>
<td>82.52</td>
</tr>
<tr>
<td></td>
<td>no</td>
<td>Agree</td>
<td>17.14</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Neither Agree nor Disagree</td>
<td>11.84</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Disagree</td>
<td>71.01</td>
</tr>
<tr>
<td>I rarely count on good things happening to me.</td>
<td>yes</td>
<td>Agree</td>
<td>11.65</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Neither Agree nor Disagree</td>
<td>12.14</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Disagree</td>
<td>76.21</td>
</tr>
<tr>
<td></td>
<td>no</td>
<td>Agree</td>
<td>20.68</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Neither Agree nor Disagree</td>
<td>14.57</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Disagree</td>
<td>64.76</td>
</tr>
<tr>
<td>Overall, I expect more good things to happen to me than bad.</td>
<td>yes</td>
<td>Agree</td>
<td>91.75</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Neither Agree nor Disagree</td>
<td>4.37</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Disagree</td>
<td>3.88</td>
</tr>
<tr>
<td></td>
<td>no</td>
<td>Agree</td>
<td>85.44</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Neither Agree nor Disagree</td>
<td>7.68</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Disagree</td>
<td>6.87</td>
</tr>
</tbody>
</table>

Significance criterion of $p < .0017$.

### Exhibit F-2. Depression Indicators for Respondents with and without Their Own 529 Account

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Have Own 529 Account</th>
<th>Response</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>felt depressed</td>
<td>yes</td>
<td>None of the Time</td>
<td>48.06</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Some of the Time</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Most of the Time</td>
<td>1.94</td>
</tr>
<tr>
<td></td>
<td></td>
<td>All of the Time</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>no</td>
<td>None of the Time</td>
<td>51.57</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Some of the Time</td>
<td>45.52</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Most of the Time</td>
<td>4.53</td>
</tr>
<tr>
<td></td>
<td></td>
<td>All of the Time</td>
<td>1.38</td>
</tr>
<tr>
<td>felt lonely</td>
<td>yes</td>
<td>None of the Time</td>
<td>73.30</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Some of the Time</td>
<td>25.24</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Most of the Time</td>
<td>1.46</td>
</tr>
<tr>
<td></td>
<td></td>
<td>All of the Time</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>no</td>
<td>None of the Time</td>
<td>66.35</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Some of the Time</td>
<td>28.84</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Most of the Time</td>
<td>3.91</td>
</tr>
<tr>
<td></td>
<td></td>
<td>All of the Time</td>
<td>0.91</td>
</tr>
<tr>
<td>had crying spells</td>
<td>yes</td>
<td>None of the Time</td>
<td>73.79</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Some of the Time</td>
<td>25.24</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Most of the Time</td>
<td>0.49</td>
</tr>
<tr>
<td></td>
<td></td>
<td>All of the Time</td>
<td>0.49</td>
</tr>
<tr>
<td></td>
<td>no</td>
<td>None of the Time</td>
<td>68.85</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Some of the Time</td>
<td>28.39</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Most of the Time</td>
<td>2.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>All of the Time</td>
<td>0.76</td>
</tr>
<tr>
<td>felt sad</td>
<td>yes</td>
<td>None of the Time</td>
<td>31.07</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Some of the Time</td>
<td>67.96</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Most of the Time</td>
<td>0.97</td>
</tr>
<tr>
<td></td>
<td></td>
<td>All of the Time</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>no</td>
<td>None of the Time</td>
<td>39.01</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Some of the Time</td>
<td>56.84</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Most of the Time</td>
<td>3.72</td>
</tr>
<tr>
<td></td>
<td></td>
<td>All of the Time</td>
<td>0.43</td>
</tr>
</tbody>
</table>

Significance criterion of $p < .0025$
### Exhibit F-3. Attitudes about Parenting items for Respondents with and without their Own 529 Account

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Have Own 529 Account</th>
<th>Response</th>
<th></th>
<th></th>
<th></th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am happy with my role as a parent.</td>
<td>yes</td>
<td>Strongly Agree</td>
<td>76.10</td>
<td>22.93</td>
<td>0.49</td>
<td>0.49</td>
</tr>
<tr>
<td></td>
<td>no</td>
<td>Strongly Agree</td>
<td>73.71</td>
<td>25.37</td>
<td>0.67</td>
<td>0.24</td>
</tr>
<tr>
<td>In my role as a parent, I have too little time for myself.</td>
<td>yes</td>
<td>Strongly Agree</td>
<td>22.93</td>
<td>48.29</td>
<td>25.85</td>
<td>2.93</td>
</tr>
<tr>
<td></td>
<td>no</td>
<td>Strongly Agree</td>
<td>17.63</td>
<td>47.35</td>
<td>29.72</td>
<td>5.30</td>
</tr>
<tr>
<td>As a parent, I enjoy the time I spend with my [child/ren].</td>
<td>yes</td>
<td>Strongly Agree</td>
<td>80.00</td>
<td>20.00</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>no</td>
<td>Strongly Agree</td>
<td>81.79</td>
<td>17.88</td>
<td>0.24</td>
<td>0.10</td>
</tr>
<tr>
<td>I feel overwhelmed with the responsibilities of being a parent.</td>
<td>yes</td>
<td>Strongly Agree</td>
<td>4.39</td>
<td>24.39</td>
<td>52.20</td>
<td>19.02</td>
</tr>
<tr>
<td></td>
<td>no</td>
<td>Strongly Agree</td>
<td>3.09</td>
<td>20.94</td>
<td>48.26</td>
<td>27.11</td>
</tr>
</tbody>
</table>

### Exhibit F-4. Distribution of Home Educational Assets for Respondents with and without Their Own 529 Account

<table>
<thead>
<tr>
<th>Asset</th>
<th>529 Account</th>
<th></th>
<th></th>
<th></th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>computer, internet</td>
<td>Yes</td>
<td>No</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do you have a computer in your home?</td>
<td>yes</td>
<td>91.75</td>
<td>8.25</td>
<td></td>
<td>0.523</td>
</tr>
<tr>
<td></td>
<td>no</td>
<td>74.03</td>
<td>25.97</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do you have Internet service in your home?</td>
<td>yes</td>
<td>88.83</td>
<td>11.17</td>
<td></td>
<td>0.580</td>
</tr>
<tr>
<td></td>
<td>no</td>
<td>67.93</td>
<td>32.07</td>
<td></td>
<td></td>
</tr>
<tr>
<td>books</td>
<td>None</td>
<td>1–5</td>
<td>7–10</td>
<td>&gt; 10</td>
<td></td>
</tr>
<tr>
<td>How many children’s books do you have in your home?</td>
<td>yes</td>
<td>0.49</td>
<td>0.49</td>
<td>3.88</td>
<td>95.15</td>
</tr>
<tr>
<td></td>
<td>no</td>
<td>1.25</td>
<td>5.43</td>
<td>7.25</td>
<td>86.07</td>
</tr>
<tr>
<td>reading</td>
<td>None</td>
<td>1–2</td>
<td>3–5</td>
<td>&gt; 6</td>
<td></td>
</tr>
<tr>
<td>During the past week, on how many days did you read to {CHILD}?</td>
<td>yes</td>
<td>1.94</td>
<td>13.59</td>
<td>38.35</td>
<td>46.12</td>
</tr>
<tr>
<td></td>
<td>no</td>
<td>4.47</td>
<td>22.09</td>
<td>40.97</td>
<td>32.47</td>
</tr>
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</table>
## Exhibit F-5. Distribution of Future Orientation Items

<table>
<thead>
<tr>
<th>Item</th>
<th>Have Own 529 Account</th>
<th></th>
<th></th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>expectations for child’s financial situation when grown</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>better than yours</td>
<td>72.8</td>
<td>87.1</td>
<td></td>
<td>0.928</td>
</tr>
<tr>
<td>about the same as yours</td>
<td>26.7</td>
<td>12.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>worse than yours</td>
<td>0.5</td>
<td>0.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>expectations for educational attainment</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; high school</td>
<td>--</td>
<td>--</td>
<td></td>
<td>0.351</td>
</tr>
<tr>
<td>graduate from high school</td>
<td>0.5</td>
<td>4.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>vocational or business school</td>
<td>1.5</td>
<td>2.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>college</td>
<td>53.8</td>
<td>66.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>graduate school</td>
<td>44.2</td>
<td>26.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>importance of a college education</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>very important</td>
<td>87.9</td>
<td>89.9</td>
<td></td>
<td>0.542</td>
</tr>
<tr>
<td>somewhat important</td>
<td>11.7</td>
<td>9.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>not very important</td>
<td>0.5</td>
<td>0.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>how likely that family will work out the costs of college for child</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>very likely</td>
<td>79.1</td>
<td>66.5</td>
<td></td>
<td>0.072</td>
</tr>
<tr>
<td>somewhat likely</td>
<td>14.6</td>
<td>27.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>somewhat unlikely</td>
<td>4.4</td>
<td>3.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>very unlikely</td>
<td>1.9</td>
<td>2.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>hopefulness of family’s financial situation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>very hopeful</td>
<td>62.1</td>
<td>51.6</td>
<td></td>
<td>0.974</td>
</tr>
<tr>
<td>somewhat hopeful</td>
<td>34.5</td>
<td>43.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>not very hopeful</td>
<td>2.4</td>
<td>4.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>not at all hopeful</td>
<td>1.0</td>
<td>0.9</td>
<td></td>
<td></td>
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</tbody>
</table>