



Center for Social Development

GEORGE WARREN BROWN
SCHOOL OF SOCIAL WORK

 Washington University in St. Louis

An Experimental Test of Child Development Accounts on Early Social-Emotional Development

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Restoring Household Financial Stability After the Great Recession:
Why Household Balance Sheets Matter

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Outline

- Child Development Accounts (CDAs)
- The SEED OK Experiment
- Methods: Data, Measures, and Estimation
- Results
- Discussion: Results Interpretation, Limitations, and Policy Implications



Child Development Accounts: A Policy Innovation for Asset Building

- Special savings accounts for children
 - Savings subsidized for the poor (e.g., matching)
 - Can be multiple sources of deposits
 - With financial education
 - For homes, education, businesses, or other development purposes
 - Ideally, CDAs are lifelong (begin at birth), universal (available to all), and progressive (greater subsidies for the poorest children)
- (for policy concept, see Sherraden, 1991)



Child Development Accounts: A Beginning for Lifelong Accounts

- Singapore's Baby Bonus and CDAs
- United Kingdom's Child Trust Fund
- Korea's Child Development Accounts
- Canada's several CDA policies
- YouthSave demonstration in developing countries

(for CDA policy review, see Loke & Sherraden, 2009)



Child Development Accounts in USA: Asset Building for Education

- CDA policies are focused on asset building for child development, education, lifelong well-being.
- Saving behavior matters for CDAs, but this is not the primary focus.
- Psychological and behavioral effects may include hope, control, and future orientation.
- By design, CDA policies can be very paternalistic, with automatic enrollment, restrictions on access until a certain age, and restrictions on use.



Policy Test of Universal & Progressive CDAs: SEED for Oklahoma Kids (SEED OK)

- Policy and research initiative designed to test the idea of universal, progressive accounts, lifelong asset building
- SEED OK tests whether CDAs promote asset accumulation and improve attitudes and behaviors of parents and children
- Research is multi-method: Experiment, Account Monitoring, and In-depth Interviews
- Oklahoma selected for the SEED OK experiment through competitive process



SEED OK Research Design

- An experiment with random sample of newborns from a statewide population
- Oversamples of African Americans, Latinos, and American Indians
- Random assignment to treatment group (n=1,358) and control group (n=1,346)
- Integrated into an existing policy structure—the Oklahoma College Savings Plan, or OK 529



Intervention Features of SEED OK

Treatment Group

State-owned OK 529 account:

1. Provides a \$1,000 initial deposit;
2. Provides information on this account;

Participant-owned OK 529 account:

3. Offers a \$100 account-opening incentive;
4. Offers a savings match for income-eligible participants;
5. Provides information on this account.

→ = Opt-out enrollment

→ = Opt-in enrollment



Methods: SEED OK Survey Data

- Baseline survey (August 2007-April 2008)
- Follow-up survey (March-July 2011)
- Sample size:
 - N=2,704 (baseline survey)
 - n=2,236 (analytic sample)



Methods: Social-Emotional Development Questions

- Ages and Stages Questionnaire: Social Emotional items for four-year-old children
 - self-regulation (9 items)
 - compliance (2 items)
 - interaction with other people (6 items)
- Example: When upset, can the child calm down within minutes?--“most of time” (0), “sometimes” (5), and “rarely or never” (10)



Methods: Identification & Estimation

- Mean difference in social-emotional development between treatments and controls
- Sub-sample comparison
- Weighted and non-weighted analyses
- Demographic and socioeconomic characteristics to control for sampling variation
- Confirmatory Factor Analysis to control for measurement errors



SEED OK Sample Characteristics

- Children: male (53%); white (65%)
- Participants: age (m=26); high school and below (56%); married (61%); employed (47%); income-needs ratio below two (66%); and renters (55%)
- Balance check in the baseline sample (N=2,704) and in the follow-up sample (N=2,236)
- Comparison on demographic and socioeconomic characteristics between those participants included in and excluded from the follow-up sample



Social-Emotional Development

Social-emotional Development Measures	Mean	SD
Mother-reported social-emotional development	29.40	18.77
Sub-scales		
Self-regulation	19.07	12.67
Compliance	4.02	4.89
Interaction with People	6.31	6.79



Mean Difference in Social-Emotional Development: Whole Sample

- Positive impact in mean difference in social-emotional development in non-weighted sample (treatment-control difference= -1.55, $p < .10$)
- No significant difference in weighted sample



Mean Difference in Social-Emotional Development: Low-income Participants

- Low-income participants:
income-to-needs ratio < 2 (n=1,053)
- Positive impact in non-weighted and weighted samples (treatment-control difference= -2.2, $p < .05$)



Mean Difference in Social-Emotional Development: Low-education Participants

- Low-education participants: education not higher than high school (n=1,193)
- Positive impact in non-weighted sample (treatment-control difference= -2.2, $p < .10$) and weighted sample (treatment-control difference= -1.7, $p < .05$)



Mean Difference in Social-Emotional Development: Welfare Recipients

- Welfare recipients: Income from TANF, Food Stamps, Supplemental Security Income, or Social Security Disability Insurance in the previous 12 months (n=970)
- Positive impact in non-weighted sample (treatment-control difference= -3.4, $p < .01$) and weighted sample (treatment-control difference= -2.4, $p < .05$)



Mean Difference in Social-Emotional Development: Renters

- Renters (n= 1,318)
- Positive impact in non-weighted sample (treatment-control difference= -2.1, $p < .05$,) and weighted sample (treatment-control difference= -1.7, $p < .05$)



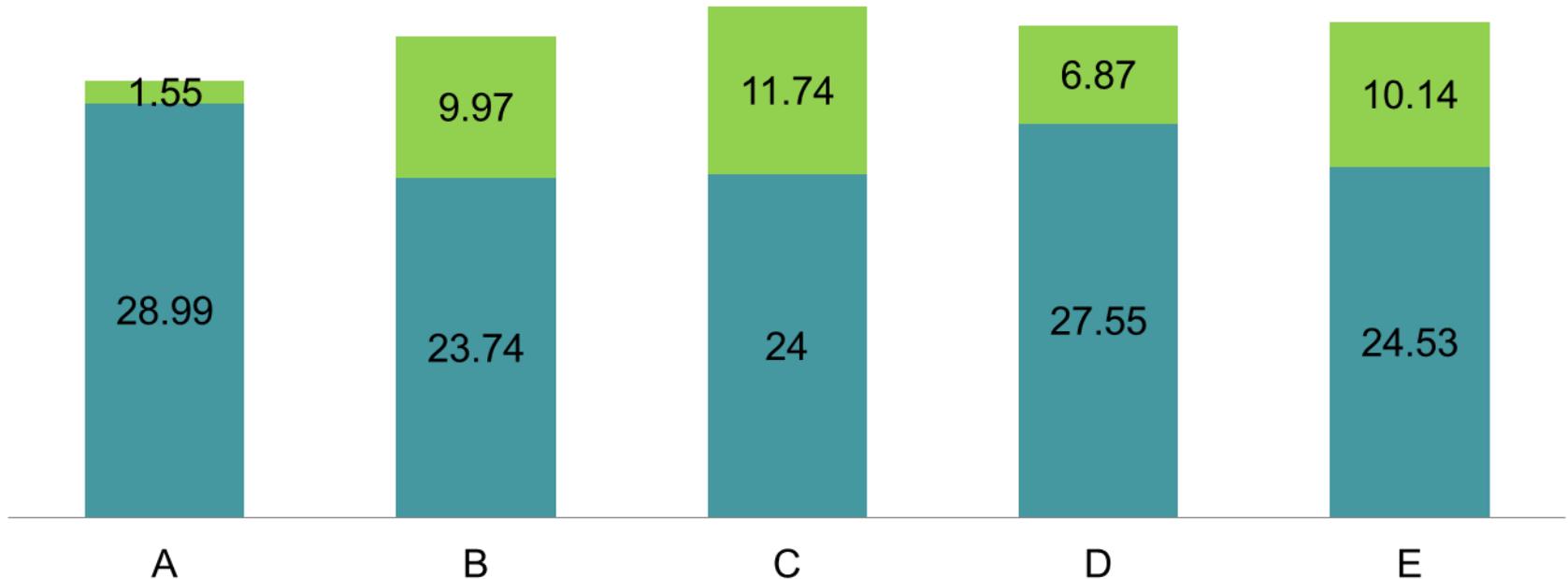
Mean Differences in Sub-Scales

- For subscale on self-regulation, positive impact in non-weighted sample ($p < .07$) but not in weighted sample
- For subscale on compliance, no significant differences
- For subscale on interaction with people, positive impact in non-weighted sample ($p < .10$) and in weighted sample ($p < .09$)



Socio-Emotional Development Effect Size

Mean Difference in Social-Emotional Development



A=treatment vs. control; B=low vs. high income; C=low vs. high education; D=welfare recipients vs. non-recipients; E=renters vs. home owners



Effect Size and Head Start Study

- Treatment-control difference in social-emotional development: Cohen's $d = -.08$
- Treatment-control difference in social-emotional development for the low-income participants: Cohen's $d = -.25$
- The Head Start Impact Study (2010): hyperactive behavior (Cohen's $d = -.21$); problem behavior ($-.14$); social skills ($.11$); positive relationships between parents and children ($.10$)



Social-Emotional Development Results Summary

- Key hypotheses in SEED OK include more positive development of children (and later, improved educational outcomes).
- Wave 2 of SEED OK occurred in 2011, when children were four years old. Social-emotional development is reported by parents via 17 items in the survey.
- Early results suggest that SEED OK may lead to more positive child social-emotional development, and the impact appears greater for disadvantaged sub-samples.



Results Interpretation

- Random error (chance)
- Social desirability bias
- Measurement error
- Impacts of household economic resources on child development:
 1. access to economic resources and
 2. indirect effects through parenting and parental behaviors



Limitations

- External validity
- Measurement of social-emotional development
- Results interpretation



Policy Implications

- At this early stage, the SEED OK intervention appears to counteract some effects of disadvantage.
- As a complement to Head Start and food supplement programs policies, universal and progressive CDAs may have potential to enhance parental expectations and involvement in child development.



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