Children's Storybooks and Early Literacy in Rural Kenya

Evidence from 1.5 Randomized Evaluations

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Presentation Outline

- Policy Issue
- Intervention Design
- Evaluation Design
- Results
- Policy Lessons
- What's Next



Policy Issue

• Investments in early childhood are critical to adult outcomes

- **Primary school learning outcomes are poor**. In Kenya (one of the best-educated countries in Sub-Saharan Africa), less than 1 in 3 third graders read at a second grade level.¹
- Learning deficits start early. Pre-literacy skills (e.g., vocabulary, letter recognition) are low for children even before they enter primary school. Without these fundamentals, children struggle to learn to read.



¹Uwezo (2016): Are Our Children Learning? Uwezo Kenya Sixth Learning Assessment Report. Nairobi: Twaweza East Africa.

Policy Issue

- Stimulating parent-child interactions, including reading, improves child development & school readiness
- Home-based interventions can be expensive
- **School-based** interventions are not always effective and miss vulnerable children
- **Parents value education**, but may not realize the importance of reading to very young children



The EMERGE Project





The EMERGE Project



CHILDREN'S STORYBOOKS



PARENT READING TRAINING



Intervention Design



- Storybooks are a **fundamental technology** for building pre-literacy skills
- Reading with pre-primary-aged children is uncommon in Kenya and many other LMICs
- Introducing parents to the dialogic reading approach may increase reading time and make it more interactive
- Dialogic reading shown to improve children's vocabulary (mostly in high-income countries)
- Can a **light-touch** intervention change reading behavior in this context?



Intervention Design

Storybooks

We created **local-language storybooks** for young children

- Adapted locallyappropriate Englishlanguage illustrated storybooks
- Translated into Luo (local language) and Swahili





Intervention Design



We developed a modified **dialogic reading** training for parents (or caregivers)

- Adapted from successful programs in Bangladesh and South Africa
- Focused on book-centered **conversations** (not just reading "to" children)
- Illiterate caregivers empowered to stimulate dialog without reading



Evaluation Design





T1. Children's storybooks

T2. Storybooks, reading training

T3. Storybooks, reading training, booster training

- 357 caregivers in 9 rural communities
- Assignment at the household level

T4. Storybooks, reading training, booster training, home visit













 Books stayed in the homes Parents reported reading more Parents demonstrated better reading quality







 Children learned the content of the books Children learned vocabulary words embedded in the books



- Providing books alone increases children's access to storybooks and comprehension of book content
- Adding training improves quantity and quality of reading with children (more stimulating parent-child reading interactions, more storybook vocabulary words learned)
- Booster training and home visits do not increase impact



Heterogeneity by Caregiver Literacy

- We measured outcomes separately for households with literate parents and households with illiterate parents
- Does a book-centered intervention primarily benefit children of literate parents, worsening a learning gap? No, and even helps to close the gap!



- Children of illiterate parents **never did significantly worse** than children of literate parents
- On some outcomes, children of literate and illiterate parents fared similarly
- On other outcomes, children of illiterate parents did **better** than children of literate parents



Policy Lessons

Parent training programs like EMERGE...

- Can be beneficial for vulnerable populations and help close a learning gap.
 - Poor households
 - Rural households
 - Out-of-school children
 - Children of illiterate parents

Compliments formal ECD schooling

- Improving pre-literacy skills for the most disadvantaged children reduces classroom disparities and makes work easier for teachers.
- Can be **low cost** and may not require expensive home visits
 - Books: \$1/book
 - Staff time: \$13/household
 - All other costs: \$9/household
 - Total: \$28/household



What's Next

Larger (2000 household), longer term (measuring impacts one year after intervention) study

- <u>Late 2017</u>: Baseline survey
- <u>Early 2018</u>: Storybook distribution and parent training
- <u>6 weeks later</u>: Midline survey
 - Initial results show similar positive short-term impacts
- <u>Late 2019</u>: Endline survey
 - Long term vocabulary and literacy development
 - And much more!









Thank You

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