

# Parental, Familial, and Community Support Interventions to Improve Children's Literacy in Developing Countries: A Systematic Review Elizabeth Spier, Pia Britto, Terri Pigott, Yael Kidron, Julia Lane, Eugene Roehlkepartain, Peter Scales, Dan Wagner, Michael McCarthy, Mengli Song, Janis Glover

Submitted to the Coordinating Group of:

	Crime and Justice
$\square$	Education
	Disability
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	Nutrition
	Social Welfare
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Yes	Cochrane	Other
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# TITLE OF THE REVIEW

Parental, Familial, and Community Support Interventions to Improve Children's Literacy in Developing Countries: A Systematic Review

# BACKGROUND

Learning is complex because it is both inherent in and applicable to every aspect of life. However, for a majority of the world's children, despite increases in primary school enrolment, academic learning is neither occurring at expected rates, nor supplying the basic foundational skills necessary to succeed in the 21<sup>st</sup> century. There is evidence that families and communities can take steps to improve children's academic learning, and many efforts are underway worldwide to improve their capacity to do so. However, there is a lack of clear information for the field regarding what type of intervention works (and what does not).

Literacy in particular is a gateway skill that facilitates learning in other areas. In order to understand the most effective ways for improving children's literacy, this review will focus on parental, familial, and community support interventions in low- and middle-income countries (LMICs) and their effects on children's literacy development. The goal of the study is to increase the availability of information for evidence-based decision making for international agencies, nongovernmental organizations, and government policy makers.

# **OBJECTIVES**

The objective of the current work is to review the existing literature on the effectiveness of parental, familial, and community support interventions intended to improve children's literacy development in LMICs. The long-term objective for this work is to increase the availability of information for evidence-based decision making for international agencies, nongovernmental organizations, and government policy makers.

The proposed review is intended to inform the following questions:

- 1. What interventions to improve children's literacy are currently being implemented outside of formal education settings, with parents, family, and communities in low-and middle-income countries?
- 2. Within a given age group and community type, which programs are most effective at building literacy skills?
- 3. What are the essential features of effective models?
- 4. What are the identified moderators and mediators of program effectiveness?

5. To what extent are the nature and effectiveness of programs influenced by contextual factors, such as cultural tradition, poverty, conflict situations, or parental literacy?

### **EXISTING REVIEWS**

We are not aware of any existing reviews or reviews in progress on this topic.

#### **INTERVENTION**

We propose examining family and community support interventions that directly state that their purpose is improving literacy and pre-literacy outcomes for children. We are focusing on interventions that are intended to increase the knowledge, behaviors, and/or resources of parents, families, and communities to support children's literacy. We will exclude programs not directly targeting child literacy, or that operate independently of parents, families, or communities. For example, an intervention to improve adult literacy would only be included in the current review if it also featured programming that actively helped adults to learn how to support their children's literacy as well. A library intervention would be included in the current review if the children accessed the library though their parents or the community, but not if children could only obtain books directly from teachers or other school staff.

We are looking to assess interventions that operate outside of the education system for three reasons. First, the educational system is a formal system. Second, in LMICs, there is a sense that the education system may not be the best place to look for solutions to improve children's learning because in many parts of the world, the education system was imported from the western world, not developed indigenously. For example, while western models stress school readiness as an outcome of formal education programs, in many parts of Africa, community readiness is equally important (Marfo, Pence, LeVine, & Levine, 2011). Therefore, it is important to focus on influences outside of formal education systems. Third, the majority of the literature on literacy development has been based on analyses involving formal education systems. The current study makes a unique contribution to the literature with its focus on complementary systems. In particular, based on our previous research, we expect two-thirds of interventions to be family support (e.g., cash transfers to mothers), and the balance to be community support (e.g., libraries).

### POPULATION

We will include studies that examine the effectiveness of literacy interventions with parents, families, and communities to benefit children in LMICs. We will include studies that examine the effects of interventions for improving child pre-literacy skills or literacy that take place outside the formal learning system in a proximal context of the learners. The delivery mechanism for the intervention must be parents, families, or communities. The age range of interest is the preschool period (approximately 3- 6 years) and primary school

(approximately 7-12 years). We are focusing on this earlier age range because children typically show far greater annual growth in literacy skills up through grade 6 than they do in later years (Hill, Bloom, Black, & Lipsey, 2008). We are including the pre-school years because there is substantial evidence that providing family- and community-based support for children's school readiness improves both on-time enrolment and literacy skills in LMICs (UNICEF, 2010).

# **OUTCOMES**

We will look for interventions that specifically impact literacy and pre-literacy outcomes for children. Literacy and pre-literacy outcomes include both direct measures of children's reading and writing, as well as early skills that predict literacy outcomes (such as print concepts, phonemic awareness, and vocabulary).

Literacy outcomes may be assessed through standardized measures, tools developed for use in the local country context or for the evaluation (as long as they are not over-aligned with programming<sup>1</sup>), and school-based examination scores. We would then determine whether there are secondary outcomes worth pursuing, such as dropout and grade progression.

# **STUDY DESIGNS**

We will include studies that use either randomized or quasi-experimental designs. We will exclude single-group, pre-post-test designs due to their weak internal validity. All other quasi-experimental studies will be included to the extent that methods exist for computing an appropriate measure of effect size. Qualitative information may be incorporated into the review to the extent that it accompanies an evaluation with an eligible design, but purely qualitative, descriptive, or case study research will be excluded.

### **OTHER CRITERIA**

Following current standards, we will select academic and grey literature for the past ten years. We will include journal articles and reports in English, Spanish, and French.

### **METHOD OF SYNTHESIS**

Where possible, we will combine study results using meta-analysis. We will examine the heterogeneity of the effect sizes for each outcome across studies, and where possible, use meta-regression to model the variation in effect size. We will use Stata and R programs to

<sup>&</sup>lt;sup>1</sup> Over-alignment occurs when assessment tools intended to capture children's development are so closely related to the intervention materials that we cannot be certain whether the child has really acquired generalizable skills. For example, over-alignment would occur when a test meant to assess a program's impact on children's overall vocabulary development focused just on specific vocabulary words introduced in the intervention.

conduct the meta-analysis and use the most recent techniques for computing effect sizes and synthesizing results.

### REFERENCES

Hill, C. J., Bloom, H. S., Black, A. R., & Lipsey, M. W. (2008). Empirical benchmarks for interpreting effect sizes in research. *Child Development Perspectives*, *2*, 172-177.

Marfo, K., Pence, A., LeVine, R. A., & LeVine, S. (2011). Strengthening Africa's contributions to child development research: Introduction. *Child Development Perspectives, 5*, 104–111.

UNICEF. (2010). *Getting ready for school: A child-to child approach, program evaluation for year one.* New York: Author.

# **EXAMPLES OF RELEVANT STUDIES**

Banerjee, A. V., Cole, S., Duflo, E., & Linden, L. (2005). Remedying education: Evidence from two randomized experiments in India. *Quarterly Journal of Economics, 122*, 1235-1264.

Macours, K., Schady, N., & Vakis, R. (2012). Cash transfers, behavioral changes, and cognitive development in early childhood: Evidence from a randomized experiment. *Applied Economics*, 4, 247-273.

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# AUTHORS REVIEW TEAM

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# **ROLES AND RESPONSIBILITIES**

- Content: Pia Britto, Elizabeth Spier, Dan Wagner, Peter Scales, Eugene Roehlkepartain, Yael Kidron
- Systematic review methods: Terri Pigott, Pia Britto, Yael Kidron
- Statistical analysis: Terri Pigott, Mengli Song
- Information retrieval: Janis Glover, Michael McCarthy

The team will be led by Principal Investigator *Elizabeth Spier*, with extensive experience in conducting international education evaluations, *Pia Britto*, an expert in childhood education, and *Terri Pigott and Yael Kidron*, experts in systematic review methods. *Janis Glover*, Yale Senior Reference Librarian, has extensive expertise in information retrieval. *Dan Wagner*, an expert in literacy in multiple international contexts, will serve as senior advisor.

*Eugene Roehlkepartain* and *Peter Scales* will provide on-the-ground content expertise in parent, family, and community support for children's learning. They will be engaged

throughout the process in scoping the literature search, identifying literature for inclusion in the review (including tapping its international network for recommendations), and reviewing draft reports for alignment with current theory as well as its relevance for policy and practice. They will actively disseminate the findings to their broad practitioner network.

An Advisory Board, comprised of academic researchers from developing countries, will also provide input about literature, context, and help with dissemination through their networks.

Quality Assurance will be provided by *Julia Lane*, who brings a set of skills including statistics in the education context, AIR's professional editors, and *Mengli Song*, who contributed substantial methodological and statistical expertise to the What Works Clearinghouse.

# **POTENTIAL CONFLICTS OF INTEREST**

Some of the reviewers have published research papers in the area of review. We have arranged for multiple reviewers from several organizations to take part in this work, ensuring that all areas of the review can be carried out by individuals and organizations with no conflict of interest (for example, relevant literature published through Yale University would be reviewed by personnel from other organizations).

# SUPPORT

No support needed at present.

# FUNDING

This work is be funded by a grant from International Initiative for Impact Evaluation (3ie). Our deadline with 3ie for completion of this review is January 2014.

### PRELIMINARY TIMEFRAME

### Protocol

Draft Protocol: 31 January 2013

Final Protocol: 1 June 2013

### Review

Draft Review: 1 September 2013

Final Review: 31 December 2013

# DECLARATION

### Authors' responsibilities

By completing this form, you accept responsibility for preparing, maintaining, and updating the review in accordance with Campbell Collaboration policy. The Coordinating Group will provide as much support as possible to assist with the preparation of the review.

A draft protocol must be submitted to the Coordinating Group within one year of title acceptance. If drafts are not submitted before the agreed deadlines, or if we are unable to contact you for an extended period, the Coordinating Group has the right to de-register the title or transfer the title to alternative authors. The Coordinating Group also has the right to de-register or transfer the title if it does not meet the standards of the Coordinating Group and/or the Campbell Collaboration.

You accept responsibility for maintaining the review in light of new evidence, comments and criticisms, and other developments, and updating the review every five years, when substantial new evidence becomes available, or, if requested, transferring responsibility for maintaining the review to others as agreed with the Coordinating Group.

# **Publication in the Campbell Library**

The support of the Coordinating Group in preparing your review is conditional upon your agreement to publish the protocol, finished review and subsequent updates in the Campbell Library. Concurrent publication in other journals is encouraged. However, a Campbell systematic review should be published either before, or at the same time as, its publication in other journals. Authors should not publish Campbell reviews in journals before they are ready for publication in the Campbell Library. Authors should remember to include a statement mentioning the published Campbell review in any non-Campbell publications of the review.

I understand the commitment required to undertake a Campbell review, and agree to publish in the Campbell Library. Signed on behalf of the authors:

Form completed by: Elizabeth Spier, PhD

Date: 06/24/2013

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