



## Enhancing early language and literacy skills for racial/ethnic minority children with low incomes through a randomized clinical trial: The mediating role of cognitively stimulating parent-child interactions

A new study by BWG member Alan L. Mendelsohn and colleagues discusses the results of a randomized clinical trial with the aim of increasing literacy in children from low-income families. The study builds on prior research on Smart Beginnings (SB), a two-tier intervention program aimed at increasing literacy skills in children from birth to age 3. The intervention includes evidence-based programs implemented in primary care (VIP; Mendelsohn et al., 2005) and in the home (FCU; Dishion & Stormshak, 2007).

The present study aims to reveal child cognitive impacts of the SB model on children at age 4. The authors hypothesized that the SB model would significantly impact children’s literacy skills and that parental support of cognitive stimulation would mediate these effects. A sample of 403 low-income families from New York, NY and Pittsburgh, PA were recruited and randomly assigned to either the SB intervention group or a control group. Primary outcomes were assessed through measures of early literacy and early language. Mediation effects were assessed through survey measures and coded video-recordings of parent-child interactions.

Results revealed no statistically significant difference between groups on either measure of early literacy. However, a statistically significant difference was found between the treatment and control groups on observed parenting support of cognitive development and observed language quality. A mediational model examines the direct and indirect paths to child receptive vocabulary, as shown below. Study results indicate that parental support of cognitive stimulation is indirectly associated with increased child reading comprehension.

Miller, E. B., Canfield, C. F., Roby, E., Wippick, H., Shaw, D. S., Mendelsohn, A. L., & Morris-Perez, P. A. (2023). Enhancing early language and literacy skills for racial/ethnic minority children with low incomes through a randomized clinical trial: The mediating role of cognitively stimulating parent-child interactions. *Child Development*. <https://doi.org/10.1111/cdev.14064>

## Implications for Future Research

The results of this study provide important evidence that parental support is an important factor in increasing early literacy in low-income families. Prior research has shown that children from lower income families have fewer opportunities for language development and that this disparity contributes to later success in school (Duncan et al., 2007). Implications exist for future parenting interventions geared at improving child literacy. Results yielded strong support for the SB intervention and calls for future research on parental support of cognitive stimulation as a mediator of early language development.

## How does this research support Principles of Expanding the Frame?

The BWG Network is striving toward several Principles, outlined in “Expanding the Frame for a New Generation of Word Gap Research: Moving our Intervention Science Toward the Promotion of Greater Equity in Children’s Early Language Experience.” Of these, the following article is an important contribution to Principle 4: “Develop language-promoting interventions that parents and caregivers find easy to access and can use within their everyday activities in their homes, childcare programs, and within various community settings where they spend time with their children.” The work of Miller and colleagues moves this Principle forward through the implementation of programming geared at increasing parental support of child cognitive stimulation, in turn promoting language development in their children. Studies like this one are important contributions to Principle 4 of the BWG Network’s goal of promoting equity in early language development.

## Meet the First Author: Elizabeth B. Miller, Ph.D, NYU Grossman School of Medicine, New York University



### What were your primary goals for this research?

**Elizabeth:** I was really interested in the mechanisms through which parents influence their children’s outcomes and finding support for the notion that if you support parents you can help kids.

### How does this study inform your next research?

**Elizabeth:** Since we found support for the theory of change of SB, I am very interested in seeing if this continues as children age and enter elementary school.