

# BRIDGING THE WORD GAP RESEARCH ROUNDUP

SYSTEMATIC SURVEY OF LANGUAGE INTERVENTIONS  
IMPLEMENTED BY EARLY CHILDHOOD EDUCATORS,  
EARLY INTERVENTIONISTS, & CHILD CARE PROVIDERS



## APPROACH

Within the language intervention studies identified by the Bridging the Word Gap Research Network (Carta, Greenwood, & Walker, 2016), we selected 513 language intervention studies published between 1975 and 2015. Within that group of studies, we focused on the 190 studies targeting interventions delivered in child care and early education settings by early childhood educators, early interventionists, child care providers, and non-parental adults.

## FINDINGS

### Who received the interventions and what were their characteristics?

- The majority of studies (75%) were carried out with preschool-aged children (aged 3-5 years).
- Much smaller percentages of studies included infants (only 4%) or toddlers (just 27%).
- Forty-six percent of studies included kindergarteners (aged 5-6 years).
- Only 35% of the intervention studies included children from low socioeconomic backgrounds.
- Only 26% of studies reported information about children's home language. From these studies, 54% indicated Spanish as children's home language.



### Who were the interventionists and how were they trained?

- In 81% of the studies, teachers, early interventionists, or child care providers were the implementers of the language interventions.
- Interventionists were most often trained in group workshops (30% of studies) with coaching and performance feedback and using some modeling.

## What were the language interventions?

- Most (76%) of the language intervention studies reported using an intervention package or a combination of strategies.
- Evidenced-based strategies were included in these language interventions:
  - Dialogic or shared-book reading (15% of studies)
  - Milieu teaching (12% of studies)
  - Modeling (23% of studies)
  - Responsive interaction strategies (6% of studies)
- Interventions in 35% of the studies lasted between 2-8 months

## What types of research designs were used to evaluate these interventions?

- Approximately a third of the studies employed either randomized control designs (34%) or single-case designs (31%).

## What types of child outcomes were reported?



- The greatest percentage of studies (50%) used standardized measures or researcher-created measures (43%) to document child outcomes.
- Expressive language (65%) and/or receptive language (46%) were the most frequently reported outcomes.
- Other outcome areas measured include literacy (26%), social communication (26%), social-emotional development (9%), or use of sign language or augmentative and alternative communication devices (5%).

## How adequately was fidelity of intervention measured?

- Intervention implementation fidelity was most often measured using direct observation (43%) or checklists or rating scales (40%).
- Intervention fidelity was reported in almost one-half of the studies (47%).
- Within these studies, 78% reported moderate to strong measurement procedures.
- Of the 89 studies reporting fidelity, 48% reported that the mean fidelity was high (at least 85%) across measurement points.

## WHAT ARE THE IMPORTANT TAKEAWAYS FROM THIS SYSTEMATIC SURVEY?

While many studies have evaluated the effects of language interventions when implemented by early childhood educators, early interventionists, and child care providers, this body of literature would benefit from taking the following actions to address the identified research gaps:

- (1) Conduct additional studies focusing on infants and toddlers.
- (2) Expand study samples by including children from low-income backgrounds and children who are Dual Language Learners.
- (3) Report specific child and family characteristics including their home language, race/ethnicity, and risk factors (including poverty).
- (4) Describe the interventionists' educational backgrounds, as well as their race/ethnicity and home language.
- (5) Employ measures that are sensitive to intervention change and can better inform practice.
- (6) Evaluate and report the quality of implementation fidelity.
- (7) Measure the effects of language interventions when they are scaled up across child care or early childhood sites.

The results of the systematic survey provide promising evidence for interventions addressing the Word Gap and shed light on the limitations in the existing body of research focusing on language interventions implemented by early childhood educators, early interventionists, and child care providers. To successfully integrate evidence from research to practice, research studies need increased transparency and consistency.

### CITATION

Reference: Walker, D., Sepulveda, S., Hoff, E., Rowe, M. L., Schwartz, I. S., Dale, P. S., Peterson, C., Diamond, K., Goldin-Meadow, S., Levine, S. C., Wasik, B. H., Horm, D. M., & Bigelow, K. M. (2020). Language intervention research in early childhood care and education: A systematic survey of the literature. *Early Childhood Research Quarterly, Special Issue*, 50, 68-85. <https://doi.org/10.1016/j.ecresq.2019.02.010>

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