# Research Gem



### Impacts of a Parent-Implemented Language Intervention on Children's Language Development Within Home Visiting

Researchers used a pilot randomized control trial to look at the efficacy of the Promoting Communication Tools for Advancing Language in Kids (PC TALK) intervention within three home visiting programs to enhance the language development of young children. The Institute for Healthcare Improvement (IHI) model was used to support implementation. The aim of the project was to see how the PC TALK intervention, supported by the IHI model (i.e., local planning team with home visitors, professional learning in three sessions, monthly implementation calls, and using the results to measure progress of children's development and implementing change) would enhance parent-implemented strategies.

#### Who Participated in the Study?

Fifty-nine children between the ages of 18-30 months who were served in one of three home visiting services (i.e., Part C Early Intervention, Early Head Start-Home-Based Option, and Parents as Teachers) participated.

#### What Intervention was Used?

This study used PC TALK, an evidence-based set of parent-implemented strategies created at Juniper Gardens Children's Project at the University of Kansas.

#### How Was It Evaluated?

The study examined the implementation of PC TALK and evaluated its effects on: (1) the frequency of parents' use of strategies as measured by the Promoting Communication Observation System, and (2) how parent strategy use affected child language as measured by the Early Communication Indicator (ECI) and Preschool Language Scale-5 (PLS-5). Home visitors learned to use two tools to provide data-based feedback to parents: one that described children's progress in language learning, and the other that reported feedback to parents on their use of strategies in relation to the child's language usage. The control group did not have access to the PC TALK strategies.

#### What were the Results?

Parents increased their use of strategies from an average of 70 strategies to 111 by the end of the study. The most frequently used strategies were commenting and labeling, open-ended questions, and imitating and expanding. Children's language scores in the intervention group were 5.22 points higher than those in the control group. While not a significant difference, it suggests an increase in parents' use of language-promoting strategies can be effective in improving children's language scores.

#### What are the Implications of this Research?

The study demonstrated that the intervention was effective in increase parents' use of the PC TALK strategies, and that it was feasible to implement the PC TALK intervention in three different home visiting models. More research is needed to understand for whom and under what conditions a parent-implemented intervention (e.g., PC TALK) is most effective and what aspects of PC TALK need to be modified to work best with different populations of families and within early childhood programs. While the IHI model informed intervention implementation through establishing local- and leadership- level planning teams, conducting professional learning sessions, convening monthly implementation calls, and using data to measure changes in children's language, future research is needed to examine if there are unique benefits to supporting PC TALK implementation using the IHI model.

Pentimonti, J., Shaw Attaway, D., Harris Little, M., Holod, A., Buysse, V., Walker, D., & Bigelow, K. (2022). Impacts of a parent-implemented language intervention on children's language development within home visiting. *Infants & Young Children*, 35(4), 285–302. https://doi.org/10.1097/iyc.0000000000224

## Meet the First Author: Jill Pentimonti, PhD, University of Notre Dame, Notre Dame, Indiana What were your primary goals for this research?

**Jill:** Our goal for this work was to understand how the PC TALK program, using the IHI model to support implementation, might impact both parental use of language-facilitating strategies and children's language gains. We were also interested in understanding the feasibility of implementing PC TALK across three types of home visiting services.

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

**Jill:** Given the promising results of this pilot study using the IHI model to support implementation of PC TALK, the next step is to conduct a fully powered study designed to separately evaluate the contribution of the IHI model to successful implementation.