

New research underscores the importance of language development in low-income, high-risk children

July 23 2018



Credit: CC0 Public Domain

Language sets the stage for how children grow, develop, and learn.

University of Miami Assistant Professor of Psychology Lynn Perry, whose research focuses on language and cognitive development in children, says a child's early years of language development are critical for the fundamentals of school readiness, such as literacy skills and social and emotional growth.

In a recent study published in the journal *PLOS One*, Perry and a team of fellow researchers who examined child speech interactions over the course of a year at the UM Linda Ray Intervention Center found that vulnerable [children](#) benefit from conversations with their peers and their teachers.

"For two decades, the Linda Ray Intervention Center, a research program in the Department of Psychology, has focused on the developmental needs of [vulnerable children](#) ages 0 to 3 who are compromised by child maltreatment and maternal substance abuse," said Director Lynne Katz, who is also a research associate professor at UM. "Critical to that research is understanding the communication experiences in the classroom between children and their teachers, as well as peer-to-peer interactions."

The study, which measured language experiences in a childcare setting specifically for low-income, high-risk children, examined how language use and development in 2- and 3-year-old children was influenced by what they heard from their teachers and their peers.

"Previous research on language development looked mostly at the role of parent-child interaction within a home setting or a lab environment, which means we're missing a big part of a child's everyday life—the classroom," said Perry. "We know that parent language is important for children's development and their academic achievement, but we don't have much research on what happens in the daycare or preschool setting."

Using a device called a Language ENvironment Analysis (LENA) recorder, Perry collected hundreds of hours of audio recordings at the center. Children wore the LENA recorder in a pocket on the front of their T-shirts once a week. LENA software then assessed whether the recorded audio was speech or not, and whether the speech came from the child wearing the recorder or from an adult or another child talking to them.

"The use of cutting-edge LENA recording devices has broadened our data collection options and allowed us to work as a team to both examine language experiences and utilize data to provide feedback to teachers upon which to build their strategies for infants and toddlers with developmental delays," said Katz.

After studying hours of the audio data, Perry found that the speech children heard from other children was positively related to their own language use, meaning children who heard the most from their peers learn more new words and vocalized more during the course of the year. Additionally, there was a positive association between a teacher talking and children's language use and development—but only when that teacher talked to the child in a back-and-forth conversation, rather than just talking to the child with no opportunity for the child to respond.

"One important aspect of the study that stands out to me is how important it was to see those conversational turns with teachers, that back-and-forth conversation with the child is very beneficial. We talked to the teachers at Linda Ray about the results, and they are very excited about this finding and currently brainstorming additional opportunities to have conversations with children," adds Perry.

More information: Lynn K. Perry et al. A year in words: The dynamics and consequences of language experiences in an intervention classroom, *PLOS ONE* (2018). [DOI: 10.1371/journal.pone.0199893](https://doi.org/10.1371/journal.pone.0199893)

Provided by University of Miami

Citation: New research underscores the importance of language development in low-income, high-risk children (2018, July 23) retrieved 20 April 2024 from

<https://medicalxpress.com/news/2018-07-underscores-importance-language-low-income-high-risk.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.