

Communicating Psychological Science: The Lifelong Consequences of Early Language Skills

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Language is a fundamental tool for communicating and navigating the world. It helps us express ourselves, connect with communities, and learn about others around us. It also has a robust effect on our achievement trajectory. For example, early language skills predict later school success: Linguistically talented children have strong executive-function competency, which in turn supports lifelong multitasking skills and other cognitive competencies. The long-term effects of early language skills also extend to financial literacy and income (Ahmed et al., 2021; Bleses et al., 2020; Suggate et al., 2018).



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Language skills vary by social context. In psychological and educational research, the most popular concept addressing this phenomenon is “the 30-million-word gap.” As originally framed by Betty Hart and Todd Risley in the 1990s, young children of lower socioeconomic status hear 30 million fewer words than children of higher socioeconomic status (Hart & Risley, 1995). Recent research shows there is no consensus about the actual state of the size of the gap, but the phenomenon broadly persists. When we shift focus from the mere number of words children hear to the quality of conversational interactions between children and adults, there is a clear lag between different socioeconomic groups in that children from lower-income homes are exposed to less language (Golinkoff et al., 2019). This clear social inequity has long-term consequences as well. For example, young children who have more high-quality conversational interactions with adults show different neurological patterns when they process a story compared with children who have fewer meaningful interactions (Romeo et al., 2018).

Some public programs have taken this gap into consideration by creating opportunities for children to engage in conversations in multiple contexts. For example, for a study that recruited parent–child dyads in the general Chicago metropolitan area between 2014 and 2017, parents received a 12-module training on early childhood development. Through home visits, they learned about the importance of talking to children and its effects on cognitive function. Between each module, parents recorded their parent–child conversations at home using a system that doesn’t require the presence of researchers. The results showed that children whose parents participated in the training received more linguistic input and better-quality conversational interactions than the control group regardless of the caregiver’s education level, language skills, or marital status. When families are informed about the importance of conversational interaction and are provided training, they become active communicators and directly contribute to reducing the word gap (Leung et al., 2020).

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As with any public health issue, one question researchers and public health officials should ask is whether well-intentioned language intervention programs benefit all populations equally. For example, researchers at the University of Texas at Austin warn against the deficiency-oriented intervention approach for the word gap, arguing that such an approach has negative consequences for Latinx immigrants' conceptualization of learning. Ironically, children diagnosed with a "word-knowledge deficit" are often placed in rigid learning environments, when spaces that are dynamic, noisy, and agentic would create more opportunities for quality conversations. Interviews with educators in Texas schools did not reveal specific biases against these Latinx students or their families, according to the researchers, but the deficit approach did create a nonideal learning environment for these students (Adair et al., 2017).

Beyond the classroom and the home, children's everyday life experiences and opportunities (or limitations) related to their socioeconomic status also play a big role in their conversational interactions. Therefore, an ecological approach that takes into consideration the multiple real-world contexts in which social and linguistic interactions occur could be useful to understand the nature of language gaps. For example, children from higher-income families spend an average of 4.5 more hours a week in social settings than children from lower-income families. Thus, children from different social backgrounds have different levels of opportunities to engage in conversational exchanges (Phillips, 2011).

Is it possible to imagine taking interventions out of family and school settings? There are creative and affirmative answers to this question. A group of researchers identified laundromats in New York City and Chicago as locations where children from lower-income families could engage in preliteracy activities. By creating exciting play nooks designed to promote talking, singing, reading, and writing, they helped children at these sites engage in literacy-related activities 30 times more than children in control groups during a 6-week period (Neuman, 2023).

This experiment is just an example of how to extend approaches to address the language gap beyond school settings and to reimagine solutions within a more applied everyday framework, given that children accompany adults in daily activities. Can we catch children's attention with intriguing opportunities? Can supermarkets be locations for reading exercises? Could public buses accommodate posters with word puzzles? What about metro stops with mini nooks? As psychological scientists, we can draw attention to these types of questions and create partnerships with local organizations to approach the language gap as a public health problem with public-facing solutions.

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