

Bridging the Conversation Gap

April 01, 2015

The Clinton Foundation sponsors an initiative called Too Small to Fail, which aims to help low-income parents better prepare their children for school. Many children who grow up in poverty enter school already far behind, and this achievement gap often persists into adulthood. Much of this achievement gap can be traced back to poor language skills, including stunted vocabulary development—the so-called “word gap.”

It’s estimated that poor children, by the time they hit kindergarten, have heard 30 million fewer words than their more fortunate classmates. The 30-million word gap was first documented two decades ago and is widely cited, and Too Small to Fail is just one of the national efforts to close the gap, to increase the quantity of language that underprivileged preschoolers are exposed to through conversation, reading and song.

But is quantity enough? To be sure, nobody is arguing that this complex problem can be reduced to the sheer number of words children know, nor that vocabulary building alone will solve it. Researchers, including those who first documented the word gap, have long argued that the *quality* of language—the complexity of words and grammar—is also a potent predictor, perhaps even more potent than quantity. They have also argued, and shown, that sensitive parenting—warm and stimulating engagement—plays an important part in a child’s language development. Even so, well-intentioned interventions such as Too Small to Fail may be overemphasizing language quantity and underestimating the quality of early parent-child experience.

That’s in part because the quality of very early, interactive language experience has never been broken down into its core features. A team of scientists is now attempting to address this oversight. Temple University psychological scientist Kathy Hirsh-Pasek, working with colleagues at several universities*, wants to broaden our understanding of language quality by examining what she calls the “communication foundation.” According to these scientists, a child and his or her caregiver co-construct this significant experience together, even before the child is beginning to speak. A mentally active child and a responsive parent influence one another, as they “converse” using gaze, gesture, vocalization and facial expression. This foundation becomes increasingly symbolic as children become more sophisticated in their use of language.

Hirsh-Pasek and her colleagues wanted to explore whether the interactive features of this early “conversation” differ in low-income households, and perhaps contribute to differences in language later on. They designed a method for studying the early communication foundation, breaking it down into three major components. The first is the child’s engagement with the caregiver in activities involving symbols, both words and gestures. For example, if a child and parent are playing with a dollhouse, and the parent puts a figure on the bed, the child might say “baby” or make a sleeping gesture. This kind of interaction is a particularly powerful context for word learning, the scientists believe. The second component is shared routines and rituals—play routines like my turn-your turn, or scripts like book time.

Finally, there is the overall flow and cohesion of the parent-child interaction, with both parent and child contributing equally, which the scientists call fluency and connectedness.

The scientists trained raters to look for these key features in actual parent-child interactions. These raters examined video records of 60 low-income mothers interacting with their two-year old children—part of a much larger study. Most of these young mothers had a high school diploma or less; only five had finished college. The scientists assessed each mother on the core conversational features of their interactions. They also assessed the sensitivity of the mothers' parenting, and measured the quantity of words used in the exchanges. They did this so they could measure the influence of the communication foundation above and beyond these other influences. Finally, they assessed the children's language—focusing on expressive vocabulary—at age 3.

Here's a simplified summary of a fairly complex statistical analysis, reported in a forthcoming issue of the journal *Psychological Science*: Most importantly, low-income children who became successful language users at age 3 had richer foundational experiences at age 2, on all three measures—engagement with symbols, shared rituals, and fluidity of interaction. What's more, while both foundational quality and language quantity mattered for later language success, foundational quality clearly mattered more. Finally, foundational quality at age 2 accounted for significant variation in language at age three, over and above sensitive parenting.

The scientists don't dispute that hearing words and experiencing sensitive parenting are both essential to later language success. But focusing on word quantity alone may ignore how these words are embedded into early parent-child experiences. Likewise, focusing on sensitive parenting alone might miss specific language-enhancing aspects of parents' and children's rudimentary—but highly influential—conversations. These findings, taken together, suggest that interventions must extend beyond bridging the word gap and focus on encouraging a “conversational duet.”

*Lauren Adamson, Roger Bakeman, Margaret Owen, Roberta Golinkoff, Amy Pace, Paula Yust and Katharine Suma

Follow Wray Herbert's reporting on psychological science in The Huffington Post and on Twitter at @wrayherbert.