

Title:

How does vocabulary structure shape early language growth and delay?

Abstract:

Measures of vocabulary growth have long centered on word counts, yielding key insights into the patterns that shape early lexical development. But vocabulary size is a blunt instrument. Macro-level counts obscure meaningful differences in the composition and organization of children's vocabularies.

In this keynote, I examine how semantic structure in early vocabularies is linked to how children acquire, represent, and understand word meanings. Using approaches that capture individual detail of semantic structure in the lexicon, we show that differences in semantic organization can constrain lexical access, support learning, and prospectively predict trajectories of language growth and delay.

These findings provide a mechanistic account of early language growth and delay that moves beyond word counts to the architecture of knowledge itself. By reframing vocabulary development as a problem of network organization, this work bridges basic science and clinical application and points toward structure-informed approaches to early identification and intervention.

Funding: NIH R01 DC018593; R21 HD108730; R21 DC023392