Semantic Adaptation in Quantifier Meanings in Preschool Aged Children

Sophie Regan

Stanford University, Stanford, California, United States

Sebastian Schuster

Stanford University, Stanford, California, United States

Judith Degen

Stanford University, Stanford, California, United States

Michael Frank

Stanford University, Stanford, California, United States

Abstract

How flexible are children's semantic representations? It is unknown whether children can adapt to different speaker's language use and form speaker-specific representations to facilitate comprehension. Adults update their expectations about how a speaker uses quantifiers after exposure to the speaker (Yildirim et al., 2016). Here, we explore whether this ability is also present in preschool-aged children. In Experiment 1, we show that preschoolers have adult-like expectations about how a generic speaker would use the quantifiers 'some' (less than 50%) and 'many' (greater than 50%). In Experiment 2, forty 4 and 5-year-olds (mean = 4.6) were exposed to a speaker who was biased to either prefer using 'some' or 'many' in a situation with a proportion of 50%. After exposure, participants updated their expectations about the use of 'some' and 'many', such that they aligned better with the exposure speaker's usage, suggesting that preschoolers are able to engage in semantic adaptation.