Babies know words, even when they are mispronounced: A meta-analytic view

As infants rapidly expand their receptive lexicon in their second year of life, they must not only learn which distinct combinations of sounds map onto distinct objects but also be flexible enough to account for variability in the signal (e.g. speakers, accents). Two decades of research examined infants' recognition of correctly pronounced (*dog*) and mispronounced (*tog*) words. In a meta-analysis, we capture how sensitivity to mispronunciations changes as infants mature, focusing on experiments testing infants younger than 30 months using the Intermodal Preferential Looking task. We analyzed the results from 14 papers containing 32 experiments reporting on data from 1001 infants aged 12 to 28 months. An examination of effect sizes revealed consistent recognition of correctly pronounced words (Hedge's g = 0.97, $p < .001$; no age effect) and an overall mispronunciation effect ($\beta = 0.6$, SE = 0.06, $p < .001$). Interestingly, effect sizes for mispronounced words increase over infant age ($\beta = 0.04$, SE = 0.02, $p < .001$), suggesting that as infants mature, they are more likely to accept mispronounced words as appropriate labels for familiar objects. These results suggest that infants' phono-lexical system becomes more flexible in the face of variability in the speech signal.