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The Effects of Phonological and Semantic Similarity on Early Word Recognition

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Abstract

By 24 months, toddlers can process language incrementally using phonology to disambiguate lexical candidates. Adult research shows incremental processing of word meaning; however, this aspect is unclear in research with toddlers. Thus, we investigated the effect of phonological and semantic competition on word recognition in 18- and 24-month-old toddlers. In a preferential-looking task, toddlers looked at semantic-related (taxonomic or thematic) or unrelated pairs of pictures with different or similar phonological onset. The results showed that the 18-month group looked at the target only when the onset of both pictures was different but not when they were similar -regardless of the type of relationship. By contrast, the 24-month group had a similar look pattern as the 18-month group, only in semantically related but not in unrelated pairs. This research suggests that at 24 months of age, toddlers can interpret language incrementally based on phonological and semantic representations.