Minimal-pair associative word-learning in 18- and 24-months-old: an eye-tracking study

Estelle Hervé, Christelle Zielinski, Franziska Geringswald & Clément François

Aix-Marseille Université, CNRS, LPL, ILCB, 13100, Aix-en-Provence, France

The first two years of human life constitute a critical period for language development, where infants build their phonological categories and exhibit increasing word-learning abilities. Here, we aim to better understand the interaction between these two processes by exploring infants' sensitivity to voicing distinctions during a minimal-pair associative word-learning task. Specifically, 18- and 24- month-old infants performed an audiovisual looking while listening task during which they were presented with two pseudo-words differing only by the voicing of their initial consonant, associated with two pseudo-objects. After a familiarization phase, a visual choice test evaluated the recognition of the two novel word-object associations and some familiar word-object pairs. The proportion of looking-time towards the target was measured using eye-tracking. We expected longer looking time to targets in 24-month-olds compared to 18-month-olds, suggesting a facilitatory effect of consolidated phonological categories in minimal pair associative word learning skills. This research will provide important insights into the interplay between early phonetic perception and the development of core associative learning mechanisms required for successful language development.