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Infant Action Prediction of Everyday Food Preparation

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Abstract

Infants' ability to anticipate the actions they observe is thought to be a critical skill in early social-cognitive development. A considerable body of research has demonstrated that infants can anticipate observed actions from a variety of cues in different kinds of visual contexts. However, most of this work has relied on screen-based eye-tracking paradigm using highly controlled computer stimuli. Less is known about whether and how infants anticipate live actions in natural settings. One prior study demonstrated that infants did anticipate their parents' actions during live, free-flowing parent-infant play, though they did so infrequently. Using head-mounted eye-tracking, the current study aimed to build upon this work by exploring whether infants make gaze predictions while observing their parents perform an everyday activity in a home-like environment—assembling several peanut-butter and jelly sandwiches. Preliminary findings reveal that infants anticipate their parents' actions at relatively high rates, indicating a close coupling between parent actions and infant gaze. Rates of prediction did not change over the course of the observation, suggesting that infants already possess prior knowledge of the action sequence structure that they utilize to successfully predict their parents' ongoing actions.