
Longitudinal predictors of individual differences in Infant Joint Attention

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Abstract

Little is known about how individual differences in the emergence of precise attention-sharing skills in infancy lead to later verbal and non-verbal social skills. As part of a larger-scale longitudinal study, infants' tendencies to follow gaze and point cues were assessed in a controlled experimenter-infant dyadic interaction in a laboratory. Data were collected from $N=10$ infants during monthly visits from 4-12 months of age. At each visit, infants did a cued gaze- and point-following task. The experimenter sat across from the infant in the center of the testing room equipped with 6 target monitors (left periphery, right periphery, right front, left front, right back and left back). In each of 20 timed trials the experimenter executed one of three social cues to direct the infant's attention to a target monitor: she either pointed at, shifted her gaze to, or both pointed and shifted gaze to the target location. A visual reward (7 sec "Baby Einstein" video clips with sound) was displayed on the target monitor if the infant made a correct gaze-shift to follow the experimenter's point and/or gaze cue. Responses to gaze/point following cues were coded for 6- and 8-month visits (mean age = 185 days, $SD = 6$ days). It was found that infants overall follow more cues at 8 months of age (mean = 33%, $SD = 15$) than at 6 months of age (mean = 15%, $SD = 15$). The Abridged Early Social Communication Scales (ESCS) were then administered at a 14-month follow-up visit. ESCS sub-scale scores at 14 months were compared to 6- and 8-month gaze/point following measures. Preliminary analysis found a correlation between overall cue-following at 8 months of age, and the ESCS Initiating Joint Attention subscale Score ($r = .51$). However, 8-month attention-following did not strongly predict other ESCS subscales. The results confirm moderate longitudinal continuity in specific non-verbal social attention-sharing skills, from 6 to 14 months of age.