

Hand preference trajectories as predictors of language outcomes above and beyond SES: Infant patterns explain more variance than toddler patterns at 5 years of age

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August 22, 2023

Abstract

Prior studies found hand preference trajectories predict preschool language outcomes. However, this approach has been limited to examining bimanual manipulation in toddlers. It is not known whether hand preference during infancy for acquiring objects (i.e., reach-to-grasp) similarly predicts childhood language ability. The current study explored this motor-language developmental cascade in 90 children. Hand preference for acquiring objects was assessed monthly from 6 to 14 months and language skill was assessed at 5 years. Latent class growth analysis identified three infant hand preference classes: left, early right, and late right. Infant hand preference classes predicted 5-year language skills. Children in the left and early right classes, who were categorized as having a consistent hand preference, had higher expressive and receptive language scores relative to children in the inconsistent late right class. Consistent classes did not differ from each other on language outcomes. Infant hand preference patterns explained more variance for expressive and receptive language relative to previously reported toddler hand preference patterns, above and beyond socioeconomic status (SES). Results suggest that hand preference, measured at different time points across development using a trajectory approach, is reliably linked to later language.

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Infant Hand Preference Predicts 5-yr Language Blinded ICD.docx available at <https://authorea.com/users/655300/articles/661161-hand-preference-trajectories-as-predictors-of-language-outcomes-above-and-beyond-ses-infant-patterns-explain-more-variance-than-toddler-patterns-at-5-years-of-age>