

## **Examining the Relation between Infant Oromotor Behaviors and Maternal Prosody of Speech.**

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Maternal-infant directed speech (IDS) serves as a basis for early speech and language learning; however, it remains unknown if and to what extent the degree of maternal speech modulation relates to infant oromotor performance. Therefore, mother and infants (6-12 months of age) participated in the current study designed to explore the relationship of maternal IDS and infant oromotor behaviors. Maternal speech recordings and measures of infant oromotor performance were collected across 3 conditions: baseline (mother talking with researcher), feeding (mother feeding baby) and play. Maternal speech samples were elicited with pictures or toys and comprised connected speech including target words containing corner vowels. Acoustic analysis included measures of prosodic modulation (F0 and intensity range and speech rate) and spectral measures to evaluate vowel clarity. Infant oromotor behaviors included the amount of vocalization (sampled with the Language Environment Analysis system), two-minute non-nutritive suck sample, and scores on the Child Oral and Motor Proficiency Scales and Pediatric Eating Assessment Tool. Maternal speech modulation and infant oromotor behaviors were correlated to evaluate their relationship. Elucidating the association between maternal prosody and infant oromotor behaviors is clinically significant, especially for those infants with oromotor delays.