

Singing interactions between mothers and infants at elevated and typical autism likelihood.

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ABSTRACT (Max. 300 words)

From early in life, parental singing establishes a foundation for synchronized communication with infants. During these interactions, parents subtly modify the acoustic properties of their singing to capture and hold their babies' attention. Infants who have an older sibling diagnosed with autism face a higher likelihood (EL) of receiving an autism diagnosis themselves. In these dyads, both the infants and their parents often show early signs of atypical interaction patterns. Such differences may emerge as parents detect early indicators—like reduced attention or fewer communicative gestures—and adjust their behavior with compensatory strategies.

This longitudinal study set out to investigate spontaneous singing exchanges between mothers and their EL infants, comparing them with dyads at a typical likelihood (TL) for autism. We assessed the frequency and duration of singing episodes as well as the specific strategies mothers employed to engage their babies. A total of 65 mother-infant dyads were recorded during free interactions when the infants were 4 and 8 months old. Moments of spontaneous singing were identified and analyzed separately.

At 4 months, the data revealed that mothers of EL infants not only initiated more singing episodes than TL mothers but also more frequently used singing to draw their infants' attention. Moreover, EL mothers tended to accentuate the rhythmic structure of their songs by elongating the upbeat portions. Overall, the findings suggest that mothers of EL infants effectively use singing as a tool to engage with their children, employing distinct strategies to enhance the regularity and predictability of their interactions.

Keywords: Singing interactions; Parent-infant interactions; Elevated likelihood of autism.