Exploring Multimodal Interactions: Haptic Cues Between Adults and Infants Aged 9 to 12 Months.

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The aim of this study was to analyse the use of touch in the communicative interaction of dyads comprising adults and infants at the end of their first year of life. We examined the extent to which touch was involved in communicative interactions and how the use of physical contact changed with age. We observed whether the physical contact was initiated by the adult or by the infant and how haptic information was coordinated with speech. Additionally, we analysed the function of haptic cues when the physical contact was adult-initiated vs. infant-initiated, as well as the use of objects in the communicative interchanges involving haptic cues. We longitudinally observed 22 parent-infant dyads in a spontaneous play situation with toys when the infants were 9 and 12 months old. Results showed some form of physical contact during 13% of the observation time. There was a tendency for physical contact to decrease with infant's age, but only when it was adult-initiated. When infants initiated the contact, it was primarily for affectionate purposes. In contrast, adult-initiated contact served a variety of functions, and was accompanied by infant-directed speech around 75% of the times. Our results revealed that adult-initiated contact frequently involved the use of objects, meaning that the adult touched the infant using a toy or placed the toy on the child's body. Adults tended to use of objects symbolically when interacting with infants, showcasing the object's characteristics, and coordinating these actions with speech. Our findings suggest that physical contact is highly coordinated with speech, especially when it involves an object. These results highlight the importance of considering haptic cues when studying joint-attention formats and analysing the role of haptic cues in promoting lexical development and language processing abilities.