

HEALTH AND HUMAN SCIENCES

The Broader Autism Phenotype in Early Childhood: Responding to Joint Attention and Language Development

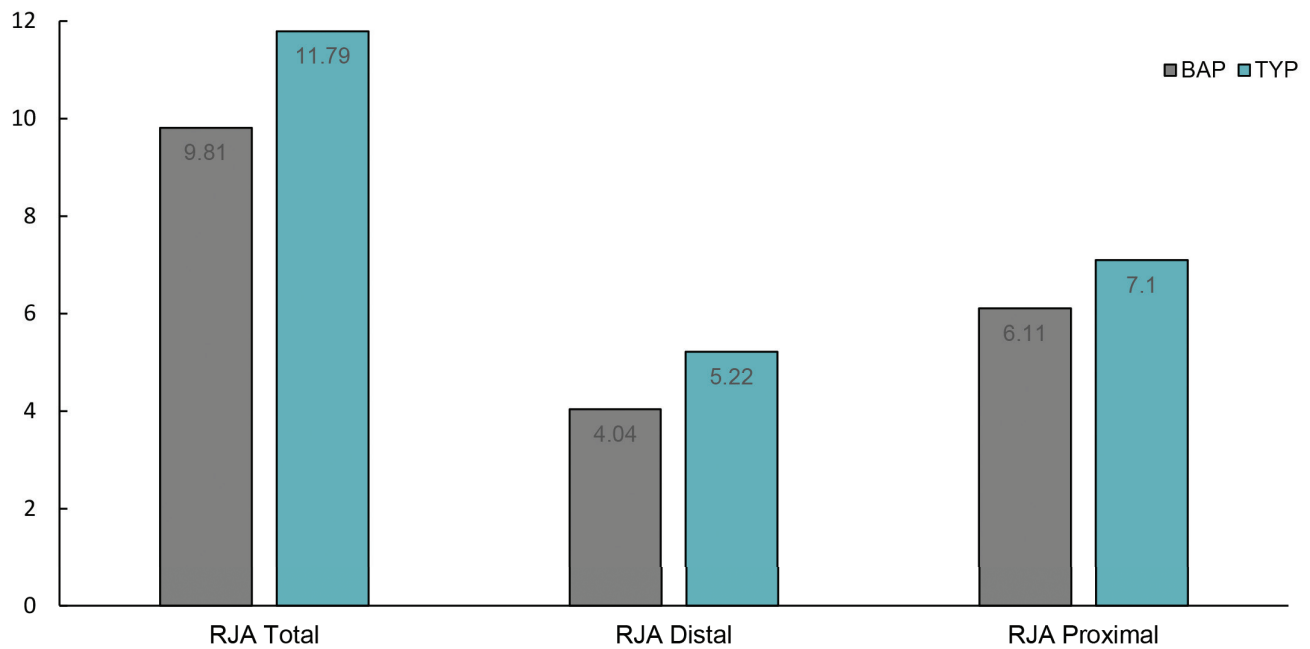
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Difficulty *responding* to interactions is a well-established “red-flag” for autism-related concerns in early childhood. Previous research demonstrates associations between rates of response to joint attention (RJA: the ability to follow a play partner’s gaze or pointing gesture to an object/event of interest) and language development in children later diagnosed with autism spectrum disorder (ASD). Previous research also suggests a developmental vulnerability among children at elevated risks for ASD (i.e., being an infant-sibling of a child with ASD). However, less is known about early RJA skills and their associated language implications, in children exhibiting subclinical ASD symptoms or the broader autism phenotype (BAP).

The present study assessed whether (1) children with the BAP exhibited fewer RJA bids than their typical peers, and (2) if there is an association

between RJA bids and concurrent language use. As part of a longitudinal study, 63 toddlers completed the Early Social Communication Skills (ESCS) at 24 months. The ESCS is an examiner-administered protocol to elicit joint attention skills. Administrations were coded for total RJA bids and RJA types (i.e., proximal or distal). At each child’s final laboratory visit, outcome groups of BAP ($n = 19$) and TYP ($n = 44$) were assigned. Overall, this study did not find significant group differences in RJA bids (see figure), nor significant associations with language use. Our results suggest RJA skills may not be a core social difficulty in children exhibiting the BAP. Future studies may build upon these findings by assessing other social behaviors that may differentiate risk.

Research advisors Ashleigh Kellerman and A J Schwichtenberg write: “Ms. Pelecky grew tremendously through this project. She learned how to differentiate between initiating and responding to joint attention bids and that null results are a part of the scientific process. Ms. Pelecky’s study highlights the importance of the broader autism phenotype within the context of elevated risk.”



Response to joint attention bids stratified by the outcome groups of BAP (broader autism phenotype) and TYP (typically developing).