

Theory of Mind and Narrative Abilities in School-Aged Children with High-Functioning Autism

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The Theory of Mind (ToM) deficit is well-documented in children with high-functioning autism (HFA). Few studies have explored the differences of ToM and narrative performances between children with HFA and typically developing children in the first and second grades. In addition, it is unclear whether ToM and narrative performances in children with HFA are related. To examine these questions, we administered a variety of ToM tasks as well as narrative tasks (with a series of comic strips) to 6- to 8-year-olds with HFA (n = 30) and typically developing children at the same ages (n = 30) 30). Results show that the HFA and matched groups responded similarly to the difficulty rankings of the ToM tasks, with Diverse Desire (DD) being the most difficult, followed by Diverse Belief (DB), Knowledge Access (KA), False Belief --Unexpected Content (FB-UC), False Belief -- Unexpected Location (FB-UL), Hidden Emotion (HE) and Secondary False Belief task (SFB). However, the matched group outperformed the HFA group on each ToM task. On narrative tasks, children with HFA performed similarly to the matched group in global narrative structure and specific linguistic features (e.g., total number of words and type-token ratio). However, compared with the matched group, HFA children used fewer psychological attributions, had lower ratio to correctly attribute character's intentions, and had more semantic intensifiers in their narratives. Finally, the ToM scores were significantly correlated with specific narrative features (i.e., ratio to correctly attribute character's intentions, usage of semantic intensifiers and number of ambiguous references). The stepwise regression model shows that ratio to correctly attribute character's intentions and usage of semantic intensifiers accounted for the most variances in HFA children's ToM performances.

Keywords: high-functioning autism, narrative, school-aged children, theory of mind