ABSTRACT:

Narrative Comprehension in Four to Seven-Year-Old Children with Autism: Testing the Weak Central Coherence Account

Heather J. Nuske & Edith L. Bavin

Despite somewhat spared structural language development in high-functioning autism, communicative comprehension deficits persist. Comprehension involves the integration of meaning: global processing is required. The Weak Central Coherence theory suggests that individuals with autism are biased to process information locally. This cognitive style may impair comprehension, particularly if inferencing is required. However, task performance may be facilitated by this cognitive style if local processing is required.
The current study was designed to examine the extent to which the 'weak central coherence' cognitive style affects comprehension and inferential processing of spoken narratives. The children with autism were expected to perform comparatively poorer on inferences relating to event scripts and comparatively better on inferences requiring deductive reasoning.
Fourteen high functioning children with autism were recruited from databases of various autism organisations (*M* age = 6:7, 13 M, 1 F) and were matched on a receptive vocabulary and a picture completion task with 14 typically developing children recruited from a local childcare centre (*M* age = 4:10, 7 M, 7 F). The children were read short stories and asked questions about the stories.

Results indicated that the children with autism were less able to make inferences based on event scripts, but the groups did not differ significantly on inferences requiring deductive logical reasoning. Despite similar group performance on questions relating to the main idea of the stories, only for the typically developing group was good performance on extracting the main idea of the narratives significantly correlated with performance on all other comprehension tasks.
Findings provide some support for the Weak Central Coherence theory and demonstrate that young children with autism do not spontaneously integrate information in order to make script inferences, as do typically developing children. These findings may help to explain communicative problems of young children with autism and can be applied to intervention program development. More research on the link between a 'weak central coherence' cognitive style and communicative comprehension in autism will be valuable in understanding the comprehension deficits associated with autism.

Keywords: Autism, Central Coherence Account, language development, comprehension,

Contact:

otarc@latrobe.edu.au

For further enquiries