



Introduction

- Autism is characterized by severe and general impairments in three areas of development including: reciprocal social interaction skills, communication skills, and presence of stereotyped often repetitive behaviors, interests, and activities.
- Much of the research analyzing narratives in children with autism have focused on the role of theory of mind (ToM). Cole, Baron-Cohen, Wheelwright, & Lely (2008), defined theory of mind as: the capability to attribute mental states to others and to understand their intents; thoughts, emotions, and motivations.
- Brown (2011) observed that written narratives of adults with high-functioning autism (HFA) were lower in quality, had more difficulty with mechanics, and were shorter in length than typical adults in the study.
- Goldman (2008) found that children with HFA had narratives that were described as a string of unconnected events, using less complex syntax, and resolution elements, which contributed to unclear renderings. Children with HFA did not make the goal evident and lacked information to make the story socially meaningful.
- Narratives:**
- Narratives are stories that convey information to the listener and vary in complexity depending on the listener's and speaker's shared knowledge.
- Narratives can be evaluated based upon their macrostructure and microstructure.
 - *Macrostructure - organization and including of story grammar elements.
 - * Microstructure - grammaticality, sentence complexity, clarity to referent.
- Purpose:**
- The purpose of this study was to compare the macrostructure and microstructure of oral and written narratives of children diagnosed with high-functioning autism.

Methodology

- Participant:**
- 10 year old male diagnosed with high-functioning autism.
- Procedures:**
- Oral and written stories were elicited using the Student Selects Story protocol (SALT, 2012) and were compared using the Index of Narrative Complexity (INC) and Systematic Analysis of Language Transcripts (2012).
- Analysis:**
- Stories (oral and written) were compared descriptively.

Results

Oral Story Retell:

- Macrostructure**
- Story Grammar Elements**
 - Included characters, feelings, actions, and unclear problem
- Number of T-units - 44**
- Organization**
 - Events did not occur in the correct order
 - Irrelevant information present
- Microstructure**
- Clausal density - 1.14**
- Early Emerging Formulaic Markers**
 - None at the beginning (e.g., Once upon a time)
 - Used "The End"
- Grammaticality - 55% of utterance**
- Cohesion - 43% of pronouns had an unclear referent.**
 - Coordinating - and, ard then
 - Subordinating
 - Adverbial - when
 - Causal - because
 - Noun phrase - who

Written Story Retell:

- Included title and one T-unit.
- *Toy Story
- *Lotso the bear killed Buzz Lightyear."
- Pictorial drawings.



Comparison of Oral and Written Narratives:

- Macrostructure
- *T-units - 44 in oral retell, 1 in written
- *Story Grammar Elements
 - Oral - characters, feelings, unclear problem, actions
 - Written - characters, problem
- Microstructure
- *No grammar errors in written story. Multiple errors in oral story.
- *Cohesion was poor in oral story and no pronouns were used in written.

Discussion and Conclusion

- Similar to previous research, the oral narrative was longer and more complex than the written narrative (Brown, 2011). However, The child's age in this study may have contributed to the shorter length, as he was younger than participants in previous research studies.
- The narratives lacked cohesion, specifically relating to the ability to attribute cause and effect relationships, and the events were not listed in a temporal order. Further more, story components were omitted leading to an unclear rendering, making the stories more difficult to follow. These observations are similar to those in previous research (Goldman, 2008).
- The effect of his limited ability to organize stories with purpose and clarity for the listener support the role of ToM (Colle et al., 2008).

Future Research

- Increase the number of participants to compare the written and oral narratives of adolescents with autism.
- Research the effectiveness of intervention approaches to improve narrative skills in both the written and oral modalities in individuals with autism.

References

Brown, H.M., & Perry, K.D. (2011). Writing, Asperger syndrome and theory of mind. *Journal of Autism and Developmental Disorders*, 41, 1464-1474. doi: 10.1007/s10803-010-1168-7

Colle, L., Baron-Cohen, S., Wheelwright, S., & Van der Lely, H. (2008). Narrative discourse in adults with high-functioning autism or Asperger syndrome. *Journal of Autism and Developmental Disorders*, 38, 28-39.

Goldman, S. (2008). Brief report: Narratives of personal events in children with autism and developmental language disorders: Unshared memories. *Journal of Autism and Developmental Disorders*, 38, 1982-1988. doi: 10.1007/s10803-008-0588-0