Narrative Macrostructure: A Comparison Between Autistic and Typically Developing Adolescents
Yasmin Andalib, Cynthia Boo, Letitia Naigles
University of Connecticut

Background

- Individuals diagnosed with Autism Spectrum Disorder (ASD) have been documented to have challenges with producing spoken narratives.1, 2
- Autistic adults had significantly lower personal narrative scores when analyzed using High Point Analysis (HPA), a measure of macrostructure and event sequencing.2
- Autistic adolescents included significantly fewer integral story plot points when retelling a storybook narrative.3

Objectives

To compare storybook and personal narrative macrostructure between autistic and typically developing (TD) adolescents via two methods: 1) HPA and 2) identification of story plot points (e.g., characters, actions, etc.).

Methods

- Sample was taken from the Longitudinal Study of Early Language.4
- Tuesday storybook:6 Elicited narrative was analyzed using measures of number of integral story plot points6 and HPA (see below).
- Personal narratives: 4 prompts (jabbed by needle, lost keys, proud moment, sporting event) Each narrative was analyzed via HPA, yielding *best* narrative score, average narrative score.

HPA Coding

- There were no significant differences found between groups for the essential plot points inclusion measure (t(36)= 1.351, p = .185).
- No variables were found to be correlated for the TD group.

Discussion

- Linguistic ability seems to be a factor in inclusion of storybook plot points, but not for demonstrating HP macrostructure.
- Using a storybook as a guide for narrative telling allowed autistic teens to perform well in HPA, demonstrating cohesion and completeness.
- One personal narrative prompt (Lost Keys) also elicited comparable HP macrostructure in NT and autistic teens.
- Takeaway: Context, including type of prompt, has considerable impact on one’s ability to tell a complete narrative, whether it be personal or a retelling.

Table 1. Demographics of sample

<table>
<thead>
<tr>
<th>Measure</th>
<th>TD (M±SD)</th>
<th>ASD (M±SD)</th>
<th>t</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>23</td>
<td>15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age in years</td>
<td>15.26 (3.05)</td>
<td>16.60 (3.20)</td>
<td>-1.279</td>
<td>.104</td>
</tr>
<tr>
<td>CELF5 (239)</td>
<td>206.17 (19.71)</td>
<td>171.00 (29.45)</td>
<td>3.651</td>
<td>&lt;.001***</td>
</tr>
<tr>
<td>DAS5 (100)</td>
<td>66.57 (13.92)</td>
<td>53.47 (15.83)</td>
<td>2.686</td>
<td>.005***</td>
</tr>
<tr>
<td>ADOS (30, ASD cutoff: 7)</td>
<td>2.65 (3.05)</td>
<td>10.73 (5.45)</td>
<td>-5.802</td>
<td>&lt;.001***</td>
</tr>
</tbody>
</table>

Fig. 1. TD > ASD only in Average Personal Narrative Score

Fig. 2. TD > ASD only for Jab and Proud Narratives

Fig. 3. Autistic adolescents w/ higher CELF & DAS scores included more plot points in their Tuesday narratives

Fig. 4. No significant relationships between Personal Narrative score and standardized tests for autistic adolescents

References


Acknowledgements

This research and presentation were supported in part by a grant from the National Institute on Deafness and Other Communication Disorders (NH00DCCD R01DC016665) as well as a Conference Presentation Award from the UConn Office of Undergraduate Research.


citation :


citation :


citation :


citation :


citation :