Effective writing requires taking the perspective of the reader. Autistic children seem to struggle with writing, but prior tasks have understudied autistic people’s writing. Processing para- and non-linguistic information is often challenging. It was thought that autistic people have trouble taking the perspective of others. Communication issues occur in cross-neurotype communication. Recent studies suggest that the issue is dyadic. Autistics understand autistics as well as non-autistics understand non-autistics. Non-autistics have trouble understanding autistics.

Prior Writing Research

Autistic people’s writing is understudied. Written language contains limited paralinguistic or non-verbal information. Effective writing requires taking the perspective of the reader. Autistic children seem to struggle with writing, but prior tasks have used limited tasks that required handwriting. Prior research has been conflicted on whether the writing of autistic adults is stronger or weaker than the writing of non-autistic adults.

Objectives of Study

To conduct an in-depth analysis of autistic and non-autistic students’ writing. To determine whether autistic strengths may be transferable to writing.

Hypotheses

1. Autistic students will make fewer grammatical errors than non-autistic students.
2. Autistic students will produce writings that are more lexically sophisticated (e.g., higher number of uncommon words)
   a. will use emotional language that is more specific
   b. will be more detail oriented in their descriptions, producing more adjectives
   c. will produce more lexical variation
3. Autistics will be more detail oriented in their descriptions, producing more sensory details
4. Autistic students will produce writings that are more lexically sophisticated
5. Autistic students will produce writings that use emotional language that is more specific
6. Autistic students will produce more lexical variation
7. Autistics understand autistics as well as non-autistics understand non-autistics. Non-autistics have trouble understanding autistics.
8. Autistic students’ writing may improve in the course of development.
9. Students should be allowed to use their preferred methods of writing.
10. Autistics’ writing may improve in the course of development.

Method

Participants

Most participants were the same as in Gillespie-Lynch and colleagues’ study. All participants (N = 42) were among CSI’s undergraduate students. Autistic participants (n = 19) were recruited from a mentorship program. Non-autistic participants (n = 23) — from the psychology subject pool.

Measures

The participants responded to the following prompt:

- Please write a very short story.
- They then revised the coding scheme using an inductive approach.
- Coded naturally fell into two categories: global, for which an entire writing sample would be coded.
- Frequency codes, for which each sample was divided into inter-punctuational segments.
- Reliability of 80% or above was obtained for 20% of the samples for holistic codes.
- 25% of the samples for frequency codes due to the varied length of the samples.

Data Analysis

Some aspects of the data were analyzed automatically using specialized software.

Two independent coders developed a coding scheme deductively based on an analysis of prior literature.

They then revised the coding scheme using an inductive approach.

Coded naturally fell into two categories: holistic codes, for which an entire writing sample would be coded. Frequency codes, for which each sample was divided into inter-punctuational segments.

Results

Table 1 provides the results of statistical analyses comparing the features of autistic and non-autistic students’ writing.

<table>
<thead>
<tr>
<th>Measure</th>
<th>Autistic</th>
<th>Non-autistic</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grammatical errors</td>
<td>.006 (.010)</td>
<td>.017 (.019)</td>
<td>.02</td>
</tr>
<tr>
<td>Lexical variability</td>
<td>.53 (.12)</td>
<td>.55 (.11)</td>
<td>.505</td>
</tr>
<tr>
<td>Type-token ratio</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Common words</td>
<td>.64 (.09)</td>
<td>.71 (.08)</td>
<td>.009</td>
</tr>
<tr>
<td>Uncommon words</td>
<td>.10 (.04)</td>
<td>.10 (.03)</td>
<td>.44</td>
</tr>
<tr>
<td>Rare words</td>
<td>.12 (.06)</td>
<td>.09 (.03)</td>
<td>.067</td>
</tr>
<tr>
<td>Reading level</td>
<td>10.0 (2.1)</td>
<td>8.4 (1.6)</td>
<td>.013</td>
</tr>
<tr>
<td>Adjectives</td>
<td>6.2 (2.5)</td>
<td>5.4 (3.5)</td>
<td>.38</td>
</tr>
<tr>
<td>Writing affect</td>
<td>3.7 (1.2)</td>
<td>2.2 (1.1)</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Emotional language</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frequency</td>
<td>1.4 (1.4)</td>
<td>1.2 (1.4)</td>
<td>.65</td>
</tr>
<tr>
<td>Sensory detail</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frequency</td>
<td>0.7 (1.6)</td>
<td>1.6 (1.9)</td>
<td>.14</td>
</tr>
<tr>
<td>Sight</td>
<td>0.5 (1.1)</td>
<td>1.1 (1.8)</td>
<td>.24</td>
</tr>
<tr>
<td>Hearing</td>
<td>0.2 (0.5)</td>
<td>0.3 (0.5)</td>
<td>.76</td>
</tr>
<tr>
<td>Plot</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall story arc</td>
<td>3.2 (1.7)</td>
<td>3.7 (1.4)</td>
<td>.29</td>
</tr>
<tr>
<td>Climax</td>
<td>42%</td>
<td>78%</td>
<td>0.026</td>
</tr>
</tbody>
</table>

Discussion

Our findings contrast with prior research that found writing to be a challenge for autistic children. Autistics’ writing may improve in the course of development. However, prior findings may also be indicative of graphomotor differences rather than writing ability. Typing may reduce some cross-neurotype communicative differences. Graphomotor barriers are reduced. Amount of para- and non-linguistic is reduced. Students should be allowed to use their preferred methods of communication whenever possible. Association writing affect with longer highly fictional writing suggests that fictional writing may be utilized to teach writing and foster enjoyment of the writing process.

References