1. Objective


However, materials in their study were not balanced across conditions, confounding functional category with putative processing load.

A recent replication with balanced materials suggests that deficits are evenly distributed across functional categories and not selective. Here we extend the analysis of the study with balanced materials, examining distinct categories of errors.

2. Method

Participants

10 aphasic speakers (1 woman) all right-handed; all with left CVA at least four months prior to testing (mean time post-onset: 21.2 months, SD = 1.56); mean age: 61.8, SD = 9.8; mean years of education: 12.2, SD = 2.4.

10 age-, sex-, and education-matched control participants.

Procedure

2 tasks * 3 conditions addressing the participants’ performance in the three functional categories:

- Sentence completion task
- Grammaticality judgment task

Materials

10 verbs were used, the same in each condition, controlled for phonological properties, regularity, and frequency. The sentences were balanced across conditions for length of phrase:

<table>
<thead>
<tr>
<th></th>
<th>Length</th>
<th>Distance</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Char.</td>
<td>Words</td>
</tr>
<tr>
<td>M</td>
<td>48</td>
<td>8,6</td>
</tr>
<tr>
<td>SD</td>
<td>6,3</td>
<td>1,1</td>
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<tr>
<td></td>
<td>0,6</td>
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</table>

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3. Results

Sentence completion responses were classified as form or lexical errors, i.e., incorrect inflectional morpheme or incorrect lexeme, respectively.

Grammaticality judgment errors were classified as acceptances of incorrect sentences versus rejections of correct sentences.

Table 2. Proportion of errors as a percentage of the total number of sentences per condition, for each group.

4. Discussion

• Our findings show similar patterns of error distributions for aphasic speakers and control participants, taking into account the large and expected overall differences between the two groups.

• The data show no evidence for a selective deficit in the production of verb inflectional errors.

• The results are not compatible with structural approaches to grammatical deficits.

• Our findings appear compatible with processing accounts.

References