2014-05-13

Inter- and Intra-Individual Variability in Non-Linguistic Attention in Aphasia

Villard, Sarah

http://hdl.handle.net/2144/8479

Boston University
**RATIONALS**

Underlying non-linguistic attentional impairment

<table>
<thead>
<tr>
<th>non-linguistic task performance</th>
<th>Linguistic task performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Difficulty paying attention in a variety of situations</td>
<td></td>
</tr>
</tbody>
</table>

**OBJECTIVES**

1. **RESEARCH QUESTION 1:** What kinds of inter-individual variability in BS-IV are present within the PWA group?

2. **RESEARCH QUESTION 2:** How does task complexity/difficulty on a non-linguistic attention task impact reaction time in PWA and in age-matched control participants?

**INTRODUCTION**

- **Language Processing**
- **Attention**
- **Treatment Gains**

**PARTICIPANTS**

- 18 individuals with chronic aphasia from a unilateral stroke (6M, mean age = 63.4, SD = 7.5)
- 5 age-matched controls (3M, mean age = 65.3, SD = 5.9)

**METHODS**

**RESEARCH QUESTION 1:**

The present study looks at the present within a group of participants with aphasia (PWA) relative to healthy controls; variability among PWA has also been noted (e.g. Tseng, McNeil, & Milenkovic, 1993; Hunting, Pumpomon, Randall, & Moore, 2011; Murray, 2012).

- Many studies on aphasia in patients have used linguistic tasks and have found PWA as a group to have poorer attention than controls on these tasks (e.g. Murray, 2000; Hula, McNeil, & Sung, 2017).
- Several studies have used purely non-linguistic tasks and have also found PWA as a group to have poorer attention and/or attention allocation than controls (Robin & Rizzo, 1989; Erickson, Goldinger, & LaPonte, 1996).
- It has also been suggested that an impairment in attention allocation may underlie or influence language impairment in aphasia (McNeil, Odell, & Tseng, 1993; Hula & McNeil, 2008).
- The present study looks systematically at five types of non-linguistic attention in aphasia.

**METHODS**

**INTRODUCTION**

**Purpose**

The present study looks at the present within a group of participants with aphasia (PWA) relative to healthy controls; variability among PWA has also been noted (e.g. Tseng, McNeil, & Milenkovic, 1993; Hunting, Pumpomon, Randall, & Moore, 2011; Murray, 2012).

- Many studies on aphasia in patients have used linguistic tasks and have found PWA as a group to have poorer attention than controls on these tasks (e.g. Murray, 2000; Hula, McNeil, & Sung, 2017).
- Several studies have used purely non-linguistic tasks and have also found PWA as a group to have poorer attention and/or attention allocation than controls (Robin & Rizzo, 1989; Erickson, Goldinger, & LaPonte, 1996).
- It has also been suggested that an impairment in attention allocation may underlie or influence language impairment in aphasia (McNeil, Odell, & Tseng, 1993; Hula & McNeil, 2008).
- The present study looks systematically at five types of non-linguistic attention in aphasia.

Between-Session Individual Variability (BS-IV) in task performance: High BS-IV has been noted in various neurologically impaired populations (e.g. Stuss et al., 1994); however, this has not been examined in aphasia. We suggest that BS-IV could impact treatment outcomes:

**RESULTS**

**DATA ANALYSIS**

**TABLES:**

**RESULTS**

**Figures:**

**QUICK TIPS**

Verifying the quality of your graphics template features may not work properly.

**SELECTED REFERENCES**

- Erickson, R. C., Goldinger, S. D., & LaPonte, L. L. (1996). Auditory vigilance in aphasic individuals: Variability within persons, suggesting inter-individual variability in this group. The effect of condition on COV was then analyzed separately for each group:

- **Kiran P.**

**REFERENCES**

- Erickson, R. C., Goldinger, S. D., & LaPonte, L. L. (1996). Auditory vigilance in aphasic individuals: Variability within persons, suggesting inter-individual variability in this group. The effect of condition on COV was then analyzed separately for each group:

- **Kiran P.**

**REFERENCES**

- Erickson, R. C., Goldinger, S. D., & LaPonte, L. L. (1996). Auditory vigilance in aphasic individuals: Variability within persons, suggesting inter-individual variability in this group. The effect of condition on COV was then analyzed separately for each group:

- **Kiran P.**

**REFERENCES**

- Erickson, R. C., Goldinger, S. D., & LaPonte, L. L. (1996). Auditory vigilance in aphasic individuals: Variability within persons, suggesting inter-individual variability in this group. The effect of condition on COV was then analyzed separately for each group:

- **Kiran P.**

**REFERENCES**

- Erickson, R. C., Goldinger, S. D., & LaPonte, L. L. (1996). Auditory vigilance in aphasic individuals: Variability within persons, suggesting inter-individual variability in this group. The effect of condition on COV was then analyzed separately for each group:

- **Kiran P.**

**REFERENCES**

- Erickson, R. C., Goldinger, S. D., & LaPonte, L. L. (1996). Auditory vigilance in aphasic individuals: Variability within persons, suggesting inter-individual variability in this group. The effect of condition on COV was then analyzed separately for each group:

- **Kiran P.**