Using Narrative Retell Tasks to Assess Change in Language Ability Following Language Intervention

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Introduction

• SLPs at the Upper Grand District School Board (UGDSB) developed a literacy based intervention program called Language Intervention Through Engaging Stories (LITES).
• Pilot study: standardized language pre and post-intervention measures did not capture the changes in language ability that SLPs were noticing in participants. A task more sensitive to short-term, iterative change in narrative skills was needed.
• The program gathered a language sample during assessment using One Frog Too Many². An equivalent measure for re-test was needed.
• A practice-based research partnership was formed to address these questions.

Substudy 1

• Are One Frog Too Many and Frog Goes To Dinner³ equivalent measures of narrative retell?
• To what extent is performance on these narrative tasks related to measures of language and non-verbal cognition?

Substudy 2

• Are the narrative tasks sensitive to changes in language ability of children who have received the intervention?

Methods

Substudy 1

Participants:
• Control: 11 participants ages 5;0 to 10;6
• LITES program: 16 participants ages 5;3 to 8;2

Standardized Measures:
• CELF⁴, the MASA⁵ and the WASI⁶.

Narrative Retell Tasks:
• One Frog Too Many and the Frog Goes To Dinner, one week apart, order varied.

Substudy 2

Participants:
• Existing data from 66 participants ages 4;9 to 6;0 who participated in the LITES program was analyzed.

Narrative Retell Tasks:
• All participants had undergone a pre and post-intervention narrative retell task. (One Frog Too Many and Frog Goes To Dinner, order varied)

Results

Substudy 1: Comparing narrative retell tasks

<table>
<thead>
<tr>
<th>Measure</th>
<th>OFTR Mean</th>
<th>FGTD Mean</th>
<th>t value</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Main events</td>
<td>56%</td>
<td>49%</td>
<td>0.5</td>
<td>n.s.</td>
</tr>
<tr>
<td>% Supporting events</td>
<td>29%</td>
<td>31%</td>
<td>0.9</td>
<td>n.s.</td>
</tr>
<tr>
<td>Total number of utterances</td>
<td>21</td>
<td>24</td>
<td>0.9</td>
<td>n.s.</td>
</tr>
<tr>
<td>MLI</td>
<td>8.3</td>
<td>6.0</td>
<td>0.5</td>
<td>n.s.</td>
</tr>
<tr>
<td>% Grammatically correct utterances</td>
<td>88%</td>
<td>83%</td>
<td>0.5</td>
<td>n.s.</td>
</tr>
<tr>
<td>% Accuracy on questions</td>
<td>68%</td>
<td>72%</td>
<td>0.8</td>
<td>n.s.</td>
</tr>
</tbody>
</table>

Correlations between narrative retell and standardized measures

<table>
<thead>
<tr>
<th>Measure</th>
<th>CELF CLS</th>
<th>MASA E</th>
<th>MASA R</th>
<th>WASI BD</th>
<th>WASI MR</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Main Events</td>
<td>0.4*</td>
<td>0.7**</td>
<td>0.5*</td>
<td>0.3</td>
<td>0.3</td>
</tr>
<tr>
<td>% Supporting Events</td>
<td>0.4</td>
<td>0.6**</td>
<td>0.5*</td>
<td>0.1</td>
<td>0.2</td>
</tr>
</tbody>
</table>

*p<0.05, **p<0.01

What does this mean?
• The narrative retell measures do not differ in terms of the type of language sample that they elicit.
• Performance on these tasks is correlated with standardized measures of oral language, expressive vocabulary, and receptive vocabulary.

Substudy 2: Capturing change in language ability following intervention

What does this mean?
• Participants performed significantly better on narrative retell tasks on post- compared to pre-intervention.
• Limitation: No control group or control measures.

Implications

The results demonstrate the utility of narrative retell tasks as measures of change in language ability as a result of intervention. Additionally, results thus far indicate a positive improvement in language ability in children who participated in LITES, and lay the groundwork for additional studies evaluating the program.

References


This research was supported by the Social Sciences and Humanities Research Council of Canada.