Examining Script Vocabulary in the Narratives of Preschoolers Who Speak African American English (AAE)

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Research Questions

For AAE-speaking preschool children:

1. Is a measure of script vocabulary usage dialect neutral (i.e., unrelated to dialect density) with the potential to serve as a less-biased language screening measure for AAE-speaking preschoolers?
2. Does the script vocabulary produced within narratives by AAE-speaking preschoolers reliably distinguish children with lower and higher overall language skills?

Participants

• 42 AAE-speaking Head Start preschoolers (see Table 1)
• Mean age 4.3 (years;months), range of 3.4 – 5.3

Table 1. Participant characteristics, assessment scores, narrative characteristics: means (standard deviations)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Mean (SD)</th>
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<tbody>
<tr>
<td>Age (months)</td>
<td>50.9 (5.8)</td>
</tr>
<tr>
<td>Script Vocabulary</td>
<td>21.0 (7.7)</td>
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<tr>
<td>Narrative Scoring Scheme (NSS)</td>
<td>12.4 (4.1)</td>
</tr>
<tr>
<td>Mean Length of Utterance in Words (MLU)</td>
<td>5.5 (1.3)</td>
</tr>
<tr>
<td>Number of Different Words (NDW)</td>
<td>57.5 (22.8)</td>
</tr>
<tr>
<td>Dialect Density Measure (DDM)</td>
<td>0.073 (0.038)</td>
</tr>
<tr>
<td>Peabody Picture Vocabulary Test-Third Edition (PPVT-III)</td>
<td>89.7 (10.3)</td>
</tr>
<tr>
<td>Clinical Evaluation of Language Fundamentals Preschool – 2nd (CELF P-2)</td>
<td>87.1 (9.4)</td>
</tr>
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</table>

Methods

• To elicit narrative retells investigators followed the protocol and script provided on the Systematic Analysis of Language Transcripts (SALT) Software Website (www.saltsoftware.com).
• Narratives were transcribed using SALT.
• The Script Vocabulary score is the number of script vocabulary words the child produced in his/her story at least once (out of 84).
• The Dialect Density Measure is the ratio of AAE features divided by the total number of words.
• Investigators also administered two standardized measures of language to each child (see Table 1).

Results

1. Script Vocabulary: dialect neutral measure?
   • In this study, there is a strong relationship between script vocabulary and other language sample measurements.
   • There is a moderate relationship between script vocabulary and PPVT and a low relationship between script vocabulary and CELF P-2.
   • There is no relationship between script vocabulary and dialect density suggesting that it is a dialect neutral measure.

2. Script Vocabulary: does it distinguish children with lower and higher overall language skills?
   • 8 out of the 42 children were considered at risk based on scores of 85 and below on both standardized tests (PPVT-III and CELF P-2).
   • This study showed that with a cutoff score of 14 for the script vocabulary measure, 5 out of those 8 children would be correctly identified as at risk (63% sensitivity) and 28 children would be correctly identified as having typical language skills (82% specificity). Overall classification accuracy was 33 of 42, or 79%.

Discussion

• Results of the current study suggest that script vocabulary may have the potential as a time-efficient screener of language, considering that it is dialect-neutral and demonstrates strong relationships with other language sample measures and moderate relationships with standardized measures.
• The Script Vocabulary measure performed well in identifying children with typical skills (i.e., specificity) and in overall classification of children. Given that identification of children at risk (i.e., sensitivity) was lower than recommended levels (Plante & Vance, 1994), script vocabulary should be used in conjunction with other measures, not as a stand-alone screener.
• Further research will be needed to examine how sensitivity of this screener could be increased.

References


