Linguistically Based Spelling Analysis and its Relation to Early School Literacy Success

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Linguistically Based Spelling Analysis and its Relation to Early School-Age Language and Literacy Success

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Background & Rationale

- Spelling is a language/linguistically-based skill.
- Assessment practices that consider all linguistic foundational areas (PA, OA, MA, MGR, SA) may be more sensitive to overall literacy abilities.
  - PA - phonological awareness /sounds
  - OA - orthographic awareness/ letters
  - MA - morphological awareness /affixes
  - MGR - Mental (Graphemic) Representations
  - SA - semantic awareness/ vocabulary
- Current assessments of children’s literacy skills provide floor or ceiling effects and not provide etiological information for instruction

Methods

Participants:  
65 Kindergarteners/ 1st graders w/ typical language & cognition  
(M age = 6:8)

Assessments:  
Primary Spelling Inventory (Bear et al., 2015)  
Woodcock Reading Mastery Letter/Word ID & Word Attack (Woodcock, 2011)

Scoring:  
1) Traditional all-or-none  
2) Linguistic Analysis (Wolter, 2015)

Results

Traditional Distribution  
Linguistic Distribution

Correlations between Spelling Scoring Type and Literacy Assessments

<table>
<thead>
<tr>
<th>Linguistic Analysis</th>
<th>All-or-None</th>
<th>Word ID SS</th>
<th>Word Attack SS</th>
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</thead>
<tbody>
<tr>
<td>Linguistic Analysis</td>
<td>-</td>
<td>-.889**</td>
<td>-.47**</td>
</tr>
<tr>
<td>All-or-None</td>
<td>-</td>
<td>-</td>
<td>.48**</td>
</tr>
<tr>
<td>Word ID SS</td>
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<td>Word Attack SS</td>
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</tbody>
</table>

** Correlation is significant at the .01 level (2-tailed)

Discussion

Compared to traditional scoring methods, Linguistic Analysis of spelling appeared to be:
1) more sensitive to a range of performance  
2) significantly & moderately correlated to reading

Future Directions

- Children with language and literacy deficits
- Predictive validity for future reading abilities
- Improve sensitivity via linguistic analysis

Clinical Implications

- Use as a dynamic assessment for children with language literacy impairments to determine multi-tiered systems of support (MTSS)
- Use to determine targets for intervention

References