

Topic Area: Literacy Assessment and Intervention

Session #: 9146

Day & Time: Saturday, November 22, 2014; 9:30 AM - 11:00 AM

Title: *The Mississippi Dyslexia Screener: An Inter-Scorer Reliability Study*

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Participant Outcomes: Participants in this poster session will be able to:

- Describe the Lexercise Mississippi Dyslexia Screening Test
<http://www.lexercise.com/forclinicians/mississippi-dyslexia-screener/>
- Describe the scoring fidelity of the Mississippi Dyslexia Screening Test
- Discuss where scoring disagreements occurred and how they were addressed

Abstract:

A recent state law in Mississippi requires dyslexia screening at all elementary schools for kindergarten and first grade students, and the law specifies that phoneme segmentation fluency and encoding (spelling) be included. Yet, scorer reliability has been a problem with assessments of early reading skills, especially in assessments of phonological segmentation (Reed & Sturges, 2012).

To help school staff with this task, Lexercise.com developed a free, online screening tool, built specifically to comply with the new law's guidelines but with computer-assisted scoring designed to improve scoring reliability.

- As required by the Mississippi law, the screener includes specific assessment procedures (e.g., DIBELs tasks).
- These various assessment procedures have been previously validated.
- No research has yet been done to validate the Lexercise adaptation of these procedures as a screening tool, but reliable scoring is a prerequisite for validity.
- The Mississippi Screener was administered to 21 1st grade students by 2 graduate clinicians.
- The scorers agreed **90%** of the time, an acceptable level of agreement for a screening assessment.

Description of the Lexercise Mississippi Screener

Following the requirement of the Mississippi law, the Mississippi Dyslexia Screener includes assessments in the following areas:

- Encoding
- Alphabet knowledge
- Nonsense word fluency
- Phoneme segmentation fluency
- Rapid automatized naming

Educational or clinical professionals with basic training in the principles of individual assessment can administer the Screener. To prepare for screening:

- Print the stimulus materials (in color) and directions from the Lexercise website.
- Review and practice the screening and computer scoring procedures.
- Schedule about 15 minutes for each student's individual screening.

Summary

Scorer reliability has been a problem with assessments of early reading skills, especially in assessments of phonological segmentation (Reed & Sturges, 2012). This research was undertaken to document the interscorer reliability for the Lexercise *Mississippi Dyslexia Screener*. In screening 21 1st graders, two Communication Sciences and Disorders graduate students agreed 90% of the time on the outcome, an acceptable level of agreement for a screening assessment. Most disagreement occurred on the *Phoneme Segmentation Subtest* and were related to two issues:

- The students produced a *consonant with schwa* (e.g., "map" segmented: /mə / æ / p /).
- The student chunked phonemes instead of segmenting each phoneme (e.g., "map" segmented as /m / æp /).

With additional scoring guidance for this subtest **scorers agreement was improved to 95%**.

References

Blackley, S. B. (February, 2013). *Mississippi dyslexia screener*. Retrieved from <http://www.lexercise.com/forclinicians/mississippi-dyslexia-screener/>

Compton, D. L., Fuchs, D., Fuchs, L. S., Bouton, B., Gilbert, J. K., Barquero, L. A., Cho, E., Crouch, R. C. (May 01, 2010). Selecting at-risk first-grade readers for early intervention: eliminating false positives and exploring the promise of a two-stage gated screening process. *Journal of Educational Psychology*, 102, 2, 327-340.

Savage, R., & Carless, S. (2005). Phoneme manipulation not onset-rime manipulation ability is a unique predictor of early reading. *Journal of Child Psychology and Psychiatry*, 46(12), 1297-1307.

Reed, D. K., & Sturges, K. M. (January 01, 2013). An examination of assessment fidelity in the administration and interpretation of reading tests. *Remedial and Special Education*, 34(5), 259-268.

Snowling, M. J., Duff, F., Petrou, A., & Schiffeldrin, J. (2011). Identification of the children at risk of dyslexia: The validity of teacher judgments using 'phonic phases'. *Journal of Research in Reading*, 34(2), 157-170.