A MEASURE OF WORD-LEVEL AUTOMATICITY 
AND ITS RELATION TO READING FLUENCY

A Dissertation

by

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ABSTRACT

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A measure of word-level automaticity may have relations with other behaviors that we associate with fluent reading. Reading graded lists of isolated words presented through a flash presentation is a practice that reading clinicians have used to measure automatic word recognition. Yet, there is a paucity of research that exists on the efficacy of this practice for assessing word-level automaticity.

This dissertation study was designed to test an informal word recognition instrument, the ASUWRI, and determined it to be a reliable and valid measure of automatic word recognition. Student performance on the Appalachian State University Word Recognition Inventory (ASUWRI) with varying flash presentation durations of 300 msec, 650 msec, 1000 msec, or 2000 msec were contrasted and compared to other measures of reading. MANOVA analyses revealed that the ASUWRI was the only dependent measure to vary across presentation duration.
conditions when combined Conditions 1 and 2 (300 & 650 msec) were contrasted
with combined Conditions 3 and 4 (1000 & 2000 msec).

Post hoc analyses revealed significant differences between the mean scores
of the dependent measures (reading tests) across conditions for each grade level.
For third graders, the ASUWRI did not differ significantly from WCPM and STAR
Reading Test across the presentation durations of 300 msec and 650 msec.
However, findings revealed that for the 2000 msec presentation duration, the
ASUWRI differed significantly from the WCPM and STAR and approached
significance for the 1000 msec duration. For fourth graders, post hoc analyses
revealed that the 300 msec flash presentation duration on the ASUWRI did not
differ significantly from the WCPM or STAR but did differ significantly from the
Woodcock. However, for the 650 msec, 1000 msec, and 2000 msec presentation
durations, the ASUWRI differed significantly from WCPM, but not from
Woodcock.

For both third and fourth graders, there was evidence that during the faster
presentation durations of 300 and 650 msec, word-level automaticity as measured
by the ASUWRI approximated automaticity in connected text as measured by
WCPM. Also, the slower duration scores on the ASUWRI may indicate decoding
ability (Woodcock) rather than automatic word recognition. Furthermore, the faster
presentation conditions of 300 and 650 msec yielded more instructional-reading-
level matches between the ASUWRI and WCPM than the slower presentation
conditions of 1000 and 2000 msec.