

## Using upper case letters to improve alexia

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Our hypothesis is that individuals with aphasia will be more accurate word readers when the first letter is uppercase rather than letters are all small print. Unlike word reading, non-word reading is phototactically regular and may look like targets in that paraphasic errors or neologisms may be present when reading errors occur. Target items included reading real words and pseudo- words (2,3,4 words stimuli). 2 female and 7male individuals with a medical diagnosis of ischemic left hemisphere stroke and presented with a clinical diagnosis of aphasia of different classifications (2 expressive, 3 mixed type, 2 anomic, 1 global). Eight participants presented with alexia and one with alexia without agraphia and were between the ages of 46 and 80 (Mean=66.2). Participants trained daily and met with the experimenter 2x a week for a supervised 45-minute clinical session. The other homework sessions mirrored these and the experimenter monitored participants progress weekly. A multiple baseline design of 2,3,4 syllable word lists respectively. Pseudo-word reading therapy tasks was also used to prevent carryover effects at the end of each training session daily. Results of a t-test repeated sample showed reading performance were found to be significantly improved in real word reading vs non-word reading with first letter as uppercase across 2,3,4 syllable words ( $p=0.044$ ,  $.05$ ) as compared to all lower-case letters but not for pseudo word reading ( $p=.062$   $.05$ ), respectively. Three of the nine subjects returned to normal levels of reading. Discussion also describes differences between non- word reading and word reading.