

ORAL READING IN BRAIN DAMAGED PATIENTS

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Majority of research about alexia is made in English that has deep orthography, which is inconsistent. Croatian orthography is highly consistent, that is, it has high spelling-sound consistency.

According to above mentioned statement, oral reading in patients with Broca's aphasia caused by cerebrovascular accident and with traumatic brain injury was tested in order to state differences in reading accuracy on real and pseudowords, on concrete and abstract nouns, on different types of words (nouns, verbs, adjectives, prepositions and adverbs), on two-syllable and three-syllable real words, on real words with high and low-frequency and on two and three-syllable pseudowords.

Purpose of this study was to determine if patients with Broca's aphasia have deep alexia and whether patients with traumatic brain injury (TBI) have any specific type of alexia.

The survey comprised 8 patients with brain damage, aged between 20 and 56. According to the cause of damage they were divided into 2 groups. First group comprised 4 patients with Broca's aphasia caused by cerebrovascular accident, aged between 37 and 55, and the second group comprised 4 patients with TBI, aged between 20 and 36. Croatian language is maternal language for all participants. They were all included in speech and language therapy lasting from 26 days up to 7 months.

The following results did not confirm our expectations. Patients with Broca's aphasia display better reading of real words than pseudowords, better reading of adverbs, prepositions and nouns, better reading of three-syllable real words, better reading of real words with high frequency, better reading of two-syllable pseudowords and equally good reading of concrete and abstract nouns. Patients with traumatic brain injury display 100% accuracy in reading real words and advantage towards reading two-syllable pseudowords. The results of this research are partially consistent with the results of other authors and the part upon which they agree is better reading of real words than pseudowords, better reading of two-syllable pseudowords and the appearance of orthographic paralexias. In this research, Broca's subjects do not display part-of-speech effect, concreteness effect, length effect nor semantic paralexias, that is, all that R. Friedman (2002.) states as main features of deep alexia, we can not classify them as having deep alexia. Subjects with traumatic brain injury display advantage towards better reading of real words and of two-syllable pseudowords, which is not enough to classify them as having certain type of alexia.

Friedman, R. (2002): Alexia in Encyclopedia of the Human Brain (Volume 1), 111-119.