Orienting of Attention
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13 | Perceptual learning effects on word recognition in Latvian children with reading difficulties

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In Latvia approx. 15-20% of school-aged children are with reading difficulties. Latvian is complicate language. There are many neural processes which participate in text decoding during reading. The aim of the study was to determine perceptual learning effects on word recognition in children with reading difficulties.

Forty-one children from Grade 3 (n=17) and Grade 4 (n=14) took part in the study. Children with reading disabilities were selected using One minute reading test. The same stimulus set was shown three times with different intervals. The stimulus set for word recognition contained 150 words. The length of the words varied from four to ten letters. Each word was shown on a computer screen for 500 ms. Answers were expected verbally. Correct and incorrect answers were recorded. Each word length was shown 15 times. Letter size corresponded to 6 cycles/ degree.

Data of correctly named words for children with reading difficulties in Grade 3 and Grade 4 were significantly different ($p<0.05$) for all word lengths. The study confirms that children in Grade 3 in perceptual learning process continues to use letter-by letter reading pattern, when older children in perceptual learning process starting to use parallel letters activation. Word recognition and processing speed improves with age, perceptual learning or lexical experience.

Key words: reading difficulties, word recognition, attention, processing speed, word length, perceptual learning