

**RELATIONSHIP OF THE PARAMETERS OF ADOLESCENTS'
EXECUTIVE FUNCTIONS AND LATERAL PREFERENCES
WITH THEIR INSTRUCTIONS PERCEPTION
ON THE INTERNET**

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Abstract: Today's teenagers participate in many educational events using the Internet. Accurate understanding of the instructions is often necessary to obtain adequate information. Quite often, the study of understanding a text or instruction on the Internet occurs in terms of the characteristics of the text, its improvement for understanding, and not in terms of the characteristics of the reader. The aim of the study was to examine the relationship of the parameters of the adolescents executive functions and lateral preferences with their instructions perception on the Internet. For this, inhibitory control was assessed in the go / go and go / no-go paradigm (Vergunov, Nikolaeva, 2009); working memory (Razumnikova, Nikolaeva, 2019), lateral preferences using a set of samples and parameters of eye movement when reading instructions on the Internet using an eye tracker. The subjects were 50 adolescents (25 boys and 25 girls) aged 10-16 years, students in grades 5-9. Factorial and regression analyses revealed a relationship between right-handedness and the duration of the first fixation in the region of interest and the number of repeated returns to the region of interest. The mean fixation time was inversely related to inhibitory control parameters. The obtained relationships reveal the dependence of the quality of perception of instructions on the Internet by adolescents on the processes of maturation of their prefrontal cortex.

Keywords: eye tracker, reading instruction, Internet, executive functions, lateral preferences

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