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## **Categorical effects of color discrimination. Part 2. Functional asymmetry and speech development disorders**

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The second part of article is devoted to studying of categorical perceptions of colour at various profiles of interhemispheric asymmetry and speech disorders at children. The main results of three large researches (all about 700 children) are described. As well as in researches of the first part of article, it was observed the expressed categorical effect - the between-category distinction is produced faster than the within-category one. Age dynamics of the between- and within-category distinction of colours is subject to essential changes. The features of brain organization of lefthanders lead to deleting of the categorical colour borders – the differences in speed of their performance of the between- and within-category tasks are expressed weaker than at right-handed persons. The speech disorders at children make braking impact on the development of categorical perceptions of colour. The most expressed differences in categorical distinction of colours at the normal and detained speech development are observed in the preschool age, but they gradually decrease to the middle school age.

**Keywords:** between-category and within-category colour distinction, age dynamics of categorical perception, functional brain asymmetry, developmental speech disorder.

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