



*Original Contribution*

**MECHANISM OF READING OF SCHOOL CHILDREN WITH CEREBRAL  
DISFUNCTION IN THE DYNAMICS OF THEIR TRAINING FROM THE FIRST  
SCHOOL GRADE TO THE END OF FOURTH GRADE**

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**ABSTRACT**

The aim of the research is to follow the specific features in the reading technique in pupils with cerebral dysfunction children from I, II and III grades in dynamics of their education until the finishing of IV grade. This article examines frequently encountered mechanism of reading according to four criteria: reading of whole words; syllable reading and reading of whole words; syllable reading; spelling.

**Key words:** cerebral dysfunction, mechanism of reading.

**INTRODUCTION**

Pedagogical practice proves the need for special attention to the categories of children who for various reasons – of biological or social nature – bear slight infringements of the functional state of brains (1, 2, 3, 4). Most of those children bear characteristic cerebral dysfunction (CD) since the number of indicators of their emotional and volitional sphere and intellectual features indicates at them being at an earlier stage of development while showing immaturity in the personality components of academic activities (5, 6).

Nevertheless that during growing in age, features of psychic infantilism decrease the previously affected cognitive activity in some of these children serves as a cause for being permanently unsuccessful at general educational schools.

Typically, children with CD show a significant discrepancy between their potential capabilities and their actual school achievements, demonstrated in an insufficient level of knowledge and written language (reading and writing) (5, 1, 2, 7). These difficulties relate to

characteristics of cognitive activity and they are results of children's insufficient readiness to absorb material taught upon their enrolment at school. Reduced ability to adopt and process perceptive information that occurs while forming the habit of reading and writing is typical for these children. In order to achieve purposeful positive influence on the level of successfulness throughout the beginner educational training, school children with CD have to be distinguished from those permanently failing and their repeated specific difficulties and typical errors in reading to be clearly defined.

Based on the above mentioned we set ourselves the task to investigate the mechanism of reading for school children with CD in the dynamics of their training from grade I, II and III to the end of grade IV.

**MATERIALS AND METHODS**

The research comprises the period of IV school years and includes totally 112 pupils. The research was held at the end of each school year.

We have been evaluating the mechanism of reading according to four criteria: reading of whole words; syllable reading and reading of whole words; syllable reading; spelling (8, 9).

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## RESULTS AND DISCUSSION

Results for school children with well adopted reading habits (control group) - define the average for the three texts (**Table 1**) shown: for **first grade**: 41.2% of school children can read whole words, the rest 58.8% can also read whole words when those are easy, but they read

syllables in words with more complex structures in all three types of texts. For the **second grade**: 84.8% can read whole words, and they read whole words when those are easy, but they read syllables in words with more complex structures. For **third and fourth grades**: all of them read whole words.

**Table 1.** Mechanism of reading of school children (I – IV grade)  
(Average values in % for the three texts – poem, familiar and unfamiliar text)

Class	Number	MECHANISM OF READING			
		Reading of whole words	Syllable reading of whole words	Syllable reading	Spelling
<b>CONTROL GROUP</b>					
I	17	41.2	58.8		
II	11	84.8	15.2		
III	26	100			
IV	22	100			
<b>SCHOOL CHILDREN WITH CEREBRAL DISFUNCTION</b>					
I	5			60	40
II	5	40	60		
III	5	100			
IV	5	100			
II	13	38.4	30.8		30.8
III	13	64.1	35.9		
IV	13	100			
III	18	66.6	27.8		5.6
IV	18	83.3	16.7		

Results for children with CD studying in grade I, monitored to completion of 4<sup>th</sup> grade (Table 1): **In 1<sup>st</sup> grade**: 60% can read in syllables and 40% can spell; **in 2<sup>nd</sup> grade**: 40% can read whole words, 60% also read whole words, but words with more complex structures they read in syllables; in the **third and fourth grades**: all read whole words.

Results for school children studying in second grade (**Table 1**), monitored till completion of fourth school grade:

**In second grade**: average for the three texts, 38,5% of the school children can read whole words; 30,8% read syllables of more complex

words, a fact better demonstrated in reading an unknown text, but they can read whole easy words. During the first grade, 30.8% could spell in the beginning of the study and began attending a Speech Centre; **in third grade**: average for the three texts, 64,1% can read whole words; 35.9%, can read easier words in whole, but read syllables in words with more complex structures (especially in an unfamiliar text); the relatively higher percentage of syllabic reading is due to the fact that school children (30.8%), who in the second grade used to spell can now read syllables in more difficult and complex words, while easier words they can read

in whole. In **fourth grade** all of them can read whole words.

Compared with boys, girls demonstrated better results: 55.6 per cent in second grade and 85.2 per cent in third grade can read whole words.

Results for school children studying in third grade and monitored till completion of fourth school grade (**Table 1**): In **third grade**: average for the three texts, 66, 6% can read whole words; 27,8% resort to syllabic reading of more complex words, especially in an unfamiliar text. In **fourth grade**: average for the three texts, 83,3% can read whole words; 16,7%, however, resort to syllabic reading of more complex words, more noticeably with an unfamiliar text, the school boy who used to spell words in third grade, already reads whole words, but he continued reading in syllables more complex and difficult words from the three texts.

### CONCLUSION

The results obtained allow for the following **conclusions** to be made:

1. All school children with CD covered by the survey - from grades I, II and III in the end of the initial training (4<sup>th</sup> grade) improved reading technique.
2. Compared with school children in the control group, however, they:
  - do not reach the level of reading without errors;
  - comparing the mechanism of reading in the third and fourth grades school children similar to the ones set as a control group,

can read whole words, but making many mistakes.

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