

Features of self-attitude in primary school children with dysgraphia and dyslexia in the conditions of digitalization of education

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Abstract. This article is devoted to the study of the influence of impaired writing and reading skills on the peculiarities of self-acceptance by younger students. The main content and results of an empirical study aimed at a comparative analysis of the specifics of self-attitude in students with dysgraphia and dyslexia and their peers without speech disorders are presented. Features of self-acceptance in the study play the role of a parameter that determines the characteristics of the semantic sphere formation of the individual not only in the standardized development, but also in the presence of deficits, namely, violations of the processes of writing and reading. The research methodology included 2 series of experimental tasks: assessment of the state of oral and written speech activity and psychometric experiment. As a result empirical studies fully confirmed the assumption about the presence of specific signs of self-attitude in pupils with dyslexia and dysgraphia the evidence of the signs categories of self-acceptance in this group of children compared to peers without violations of reading and writing was determined. The identified features of self-attitude will be taken into account when building a didactic model of teaching younger students with disorders of writing and reading processes in general basic education.

1 Introduction

Digital civilization brings society to a new stage in the development of globalization processes, causing changes in the functioning of entire social institutions, and the educational system reacts with rapid transformation through the widespread use of distance education technologies. At the present stage, psychologists, physiologists, speech therapists in their experimental research and methodological developments note the need to change approaches to teaching students in connection with the processes occurring in the communication space (McDool, Powell, Roberts, Taylor, 2020; Stosic & Stosic, 2013; Dixon, Yssel, McConnell & Hardin, 2014). Researchers conclude that the success of today's students, the effectiveness of their learning and socialization is largely determined by the level of proficiency not only in oral and written, but also in display communication (Mangen, Walgermo, Bronnick, 2013) as well as the formation of strong motivational attitudes to learning activities and self-organization (Hietajarvi, Tuominen-Soini, Hakkarainen, Salmela-Aro, Lonka, 2014).

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Under these conditions, the most vulnerable category of younger students is the process of forming the prerequisites for the individual to reach a new level of social reality, changing self - image and primary structuring of the motivational and semantic sphere of the individual. At the same time, according to research by the Russian Ministry of Health, 31.6% of students have school maladaptation, which is manifested in most children in the form of writing disorders (dysgraphia) and reading disorders (dyslexia) (Zavadenko, 2016). A large-scale nation-wide Russian survey on the problems of dysgraphia and dyslexia revealed insufficient awareness of parents of students and teachers of secondary schools about the need for early detection and speech therapy correction of specific errors in writing and reading due to unformed phonemic processes, insufficient kinesthetic differentiation, violations of language analysis and synthesis (Velichenkova, Akhutina, Rusetskaya, Gusarova, 2019). The Authors emphasize that failure and lack of adaptation in educational activities soon cause students with dysgraphia and dyslexia not only a negative emotional and personal attitude to the subject, teacher, peers, but also to learning in general and the prospects associated with it, and the formation of such complex activities as writing and reading requires a certain level of emotional and volitional maturity, self - esteem and is inextricably linked with the personal sphere (Lewis, Wheeler & Carter, 2017). Methodological prerequisites for the study were not only works in the field of speech therapy and defectology by T. V. Akhutina, G. V. Chirkina, L. N. Efimenkova, A. N. Kornev, I. N. Sadovnikova, T. A. Fotekova (Fotekova, Akhutina, 2002), but also the characteristics of personal peculiarities of younger schoolchildren described by psychologists: L. S. Vygotsky, V. V. Davydov, N. F. Talyzina, D. B. Elkonin, L. I. Bozhovich. Studies of the semantic sphere of personality considered by A. G. Asmolov (Asmolov, 2016), V. S. Mukhina, V. I. Slobodchikov, E. V. Subbotky, and D. A. Leontiev are studied since didactic and since creating situation in school by Abakumova I. V. (Abakumova, Zorina, 2017; Abakumova, Pronenko, Godunov, 2019), V. T. Fomenko, P. N. Ermakov, I. A. Rudakova, as well as the transformation of meaning formation in children with disabilities, reflected in the works of L. V. Kosikova, E. A. Koltunova (Koltunova, 2012), Yu. A. Maslova, S. S. Kuzenko are studied. Taking for basic studies that claim that "the development of artistic perception is largely interrelated with the development of meaning formation in younger adolescents, which includes interpersonal and intrapersonal components" (Kara, Abakumova, Kruteleva, 2014, p. 1046), the main method for studying the influence of writing and reading disorders on the features of self-attitude as a reflection of the semantic sphere of the individual was the projective technique "self-Portrait".

2 Materials and methods

The purpose of the empirical study conducted on the basis of the "Lyceum No. 27 named after A.V. Suvorov" in Rostov-on-Don was to identify the features of self-acceptance by younger students with dysgraphia and dyslexia. The object of the comparative study was primary school children with dysgraphia, dyslexia and their peers without writing and reading disorders aged 8 to 11 years. The method of empirical research consisted of 2 experimental series aimed at confirming or refuting the hypothesis that dysgraphia and dyslexia can influence the specifics of self-acceptance in primary school age. The sample consisted of 117 primary school children (48 boys and 69 girls) aged 8-11 years.

The methods were preceded by monitoring the speech of children in educational and extracurricular activities, conducted in a summer school camp and contributing to a preliminary qualitative assessment of communicative behavior, the state of the monological and dialogical forms of oral speech of students.

In the first series of the experiment, we used a test method for rapid diagnostics of written speech of younger schoolchildren by T. A. Fotekova And T. V. Akhutina (Fotekova,

Akhutina, 2002), which allows to assess the skills of language and sound analysis, the formation of writing and reading processes.

In the second series, the projective technique "self-Portrait" (R. Burns) (Big encyclopedia of psychological tests, 2006) was carried out, aimed at diagnosing unconscious emotional components of the personality (self-esteem, current state, neurotic reactions of anxiety, fear, aggressiveness). The following criteria for signs of self-attitude were studied: 1) self-esteem, 2) intellectual and social adequacy, 3) current states of control over bodily drives, 4) location of basic needs and drives, 5) sensitivity to criticism, public opinion, 6) neurotic reactions of anxiety, 7) fears 8) aggressiveness, 9) expressed protection, 10) egoism, narcissism, 11) depression, 12) dependence, 13) emotional immaturity, infantilism 14) demonstrativeness.

3 Results

Quantitative analysis of the results of the first series of methods – test by T. A. Fotekova, T. V. Akhutina (Fotekova, Akhutina, 2002) revealed 27 children – 23.3% with dysgraphic and dyslexic disorders.

According to the results of the "Autopotret" projective technique conducted in the second series, the respondents were divided into 3 groups: 1 group – younger students with dysgraphia, dyslexia, whose drawings had peculiarities - 27 people (23%); 2 group - younger students without speech disorders, but with specific test performance – 67 people (57%); 3 group – younger students without speech pathology and specific test performance – 23 people (19%).

The third group of students who did not have speech disorders and presented a drawing, the interpretation of which indicated adequate self-esteem and the absence of signs of neurotic reactions, was excluded from comparative analysis of the test results.

In the group of students with dysgraphia and dyslexia, the maximum indicators were recorded for the following categories of self-attitude signs: moderate dependence was found in 77% (n=21), strong defense – 71% (n=19), moderate fears – 66% (n=18), low self-esteem – 49% (n=13), high social and intellectual claims – 52% (n=14), moderate aggression – 45% (n=12) and denial of bodily drives – 44% (n=12). The primary data is presented in table 1.

Table 1. The severity of symptoms of self in pupils with dyslexia and dysgraphia.

Sign	Category symptom	Younger students with dysgraphia, dyslexia	
		Qty	%
self esteem	low	13	49
social adequacy	high claims	14	52
	inadequate	11	40
control of bodily drives	denial of drives	12	44
sensitivity to public opinion	ignoring	16	59
	increased	10	37
	moderate	16	59
fears	moderate	18	66
aggression	moderate	12	45
pronounced protection	clearly visible	19	71
egoism	moderate	15	56
dependence (including on the mother)	moderate	21	77
infantilism	moderate	14	51

In schoolchildren without speech pathology, the leading indicators on the signs of self-attitude were different. Thus, 76% (n=51) of respondents in this group showed an adequate

level of self - esteem, but a high percentage of moderate selfishness 65% (n=45). Remarkable that the scales "depression", "addiction", "infantilism" and "demonstrativeness" revealed the absence of these signs in more than 40% of respondents in this group. The primary data is presented in table 2.

Table 2. The severity of signs of self-attitude in younger students without violations of writing and reading.

Sign	The criteria for the symptom	Primary school pupils without violations of reading and writing	
		Qty	%
self assessment	adequate	51	76
social adequacy	high claims	46	69
aggression	not shown	32	47
egoism	moderate	45	65
anxiety	moderate	31	47
dependency	no signs	39	59
depression	no signs	31	47
demonstrativeness	not shown	33	49

A comparative analysis of the results showed that in both groups, a fairly high level of social claims can be noted (46 people – 69% among students without writing disorders and 14 people – 52% among students with dysgraphia); manifestations of defensive reactions (41 people – 62% among well-educated students and 19 people – 71% among students with dysgraphia); moderate anxiety (31 people – 47% among students without dysgraphia and 59% among students with writing and reading disorders). Peculiar is the coincidence of high rates of lack of sensitivity to public opinion: 43 people – 65% of successful students and 16 people – 59% of students with dysgraphia. Respondents with dysgraphia and without writing disorders overwhelmingly did not depict ears in self-portraits, which is probably due to the specifics of the modern communication environment and deserves a separate study.

Significant differences in the results of the method in the respondents of the two groups were noted on the scales "fears", "aggression", "dependence", where the leading indicators are for students with dysgraphia.

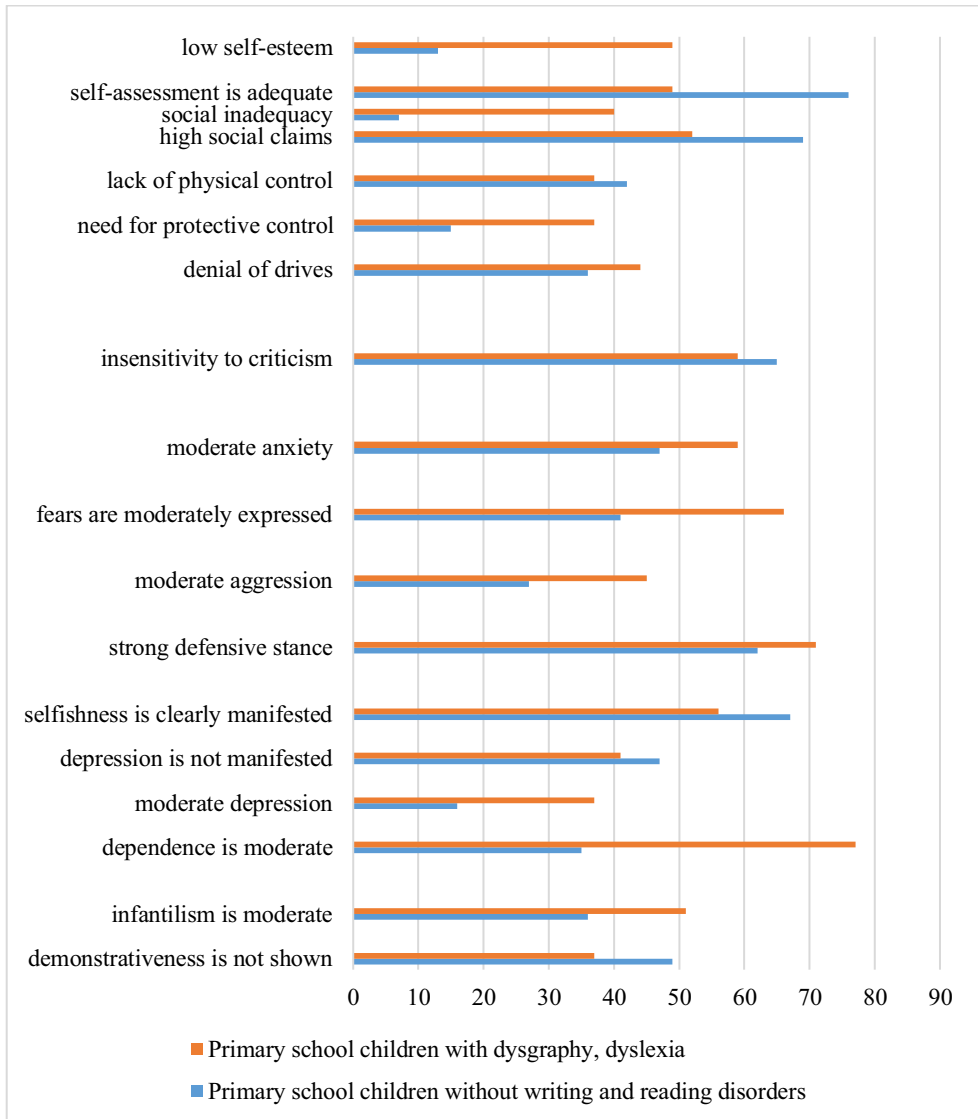


Fig. 1. Comparative analyses of projekt method of Self-portraite done by primary schoolchildren wich dusgraphya, dyslexia.

4 Discussion

Assessing the severity of features of self-evaluation in primary school children with dysgraphia it is possible to diagnose the following. A high level of social claims combined with a pronounced defensive position with a high indicator of aggressiveness indicate the presence of internal conflict in children of the studied category, caused by difficulties in the stages of maturation of the "I" and characterized by a violation of the normal mechanism of adaptation. Recorded in learners with dyslexia dysgraphia and expressed the fears, anxiety combined with severe dependence (including mothers) have a direct relationship with the difficulties of adjusting to the new social reality, fear of growing up and manifestations of

compensatory aggression that was emphasized in the works of Huhulaeva O. V. (Huhulaeva, 2018).

The results of the study in a group of primary school children with dysgraphia and dyslexia lead to the conclusion that the process of mastering writing and reading skills is inextricably linked with the emotional – volitional sphere and features of self-esteem, which was emphasized by researchers (Shchukin, 2007), require the formation of a certain level of motivational attitudes of the individual, as shown in recent years (Dolgova, Ziborova, Petrichenko, 2018). However, the interpretation of the results of the projective test reveals the influence of writing and reading disorders on the process of self-acceptance as a reflection of the formation of reflection and the development of the value-semantic sphere of the individual, which deserves additional study and verification.

Special significance of the problem of dysgraphia and dyslexia and related phenomena of school maladaptation is studied by specialists in various fields of science: pediatricians and pediatric neurologists (Rumyantseva, 2018; Siqueira, Gurge-Giannetti, 2011), neuropsychologists and speech therapists (Velichenkova, Akhutina, Rusetskaya & Gusarova, 2019; Rumyantseva, 2018), psychologists and teachers (Taghvayi, Vaziri, & Lotfi kashani, 2012) and they all point to the need to prevent writing disorders and school maladjustment through early detection of dysgraphia and dyslexia and an interdisciplinary integrated approach to the diagnosis and correction of writing and reading disorders, as indicated in our research (Abakumova, Elagina, Matsyuk, 2020)

5 Conclusions

1. The hypothesis of the study about the influence of dysgraphia and dyslexia on the features of self-acceptance in younger schoolchildren was confirmed. The results of the "self-Portrait" method revealed data for fluctuating self-esteem, a high level of claims combined with a defensive position and manifestations of aggression, as well as a weak sensitivity to public opinion.
2. The data obtained as a result of performing the "self-Portrait" technique by younger students with dysgraphia and dyslexia correlate with studies of the causes of writing and reading disorders, such as anxiety and neurotic reactions, and research on the transformation of the semantic sphere in students with disabilities.
3. A fairly high percentage of children (57%), who have a good social development conditions and the absence of disorders of school skills according to the results of the methodology revealed features of self-attitude, indicating neurotic reactions, internal conflict.
4. Since writing and reading disorders are ranked according to their severity and are found in students with varying degrees of disabilities and features, it can be assumed that the range of changes in the semantic sphere in younger students with dysgraphia and dyslexia is much wider than was recorded by the results of the "self-Portrait" projective technique. Features of the semantic sphere of this category of children need further research and verification.
5. Expanding the boundaries of the study of the semantic sphere of primary school children with dysgraphia and dyslexia, it is advisable to study the features of communicative behavior in this category of children to consider the features of group concentrations.
6. Combining the analysis of the results of the study of self-attitude and attitude to others (peers, close relatives, teachers) in primary school children with dysgraphia, dyslexia will provide an opportunity to describe the features of the semantic sphere of schoolchildren dysgraphia and dyslexia and to give practical recommendations on harmonization of the development and the optimization of teaching this category of students.

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