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# **Psycho-Logopaedic Perspectives on Writing Reading Premises of Preschoolers**

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#### Abstract

Scientific studies confirm that psychological preparation for school depends on the level of language development, as well as on the psycho-pedagogical intervention programs applied during the preparation for school. The activities of learning to read and write are some of the most complex, because they involve a multitude of imported cognitive processes: language, attention, memory, visual processing of graphic symbols, as well as phonological processing. Two categories of preschool children aged 6-7, with typical development (TD) and phonological disorder (PD), were investigated. The experimental results obtained by the children in the active test Burlea are described and interpreted and the difference between them is estimated. In order to remedy the dyslexodysgraphic predispositions, psycho-speech therapy sessions were held, designed based on an integrative program composed of exercises, games and techniques with a specific purpose. The efficiency of the activities for recovering the dyslexodysgraphic predispositions was verified by retesting the preschool children with phonological disorder, involved in the intervention. Statistical processing confirmed the validity of the specialized intervention carried out.

**Key words:** Dyslexodysgraphic predispositions; integrative psycho-speech therapy program; premises for reading and writing; speech therapy activity; typical development

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# **1. Introduction**

Modern life, with the complex level of socio-economic development, rapid changes in the social status of communities, requires great adaptive capacities of modern children. One of the most important tasks of modern psychology is to overcome and psychologically remedy deviations in child development and their extramedical assistance. In this sense, various specialists who deal with childhood problems notice that from an early age more and more children have problems associated with mental development, and that they pay more and more attention to non-drug support, psychological support, recuperative, developmental-correctional for children with certain developmental problems, as early/early as possible.

The preschool period is rightfully considered the "golden period" in the child's development, because it is marked by a decisive moment for his later success, in school and in life. Gradually, the child learns to communicate, collaborate, fits into the environment, assimilates experiences, and acquires behaviors. One of the most important aspects in the general development of preschool children is mastery of their mother tongue. The linguistic thesaurus is developed during ontogenesis through the gradual internalization of the objective structures of the language, which includes not only correct pronunciation, but also the development of an elevated language at the lexical, semantic, syntactic, pragmatic level - skills acquired gradually, throughout the instructional process - preschool didactic (continuing also in school), reaching its peak with literacy and the acquisition of the read-write language - the valences of which open new horizons of development and social integration. All these skills and abilities cannot be achieved outside of language.

Human language has become the most important means of relationship between consciousness and objective reality, an instrument of knowledge, of creating cultural and moral values, of transforming nature. It constitutes one of the most complex psychosocial phenomena and represents the fundamental act of legitimizing man and placing him on the scale of evidence and progress of living matter. The Logos was and will always remain the intellectual expression of consciousness. The consistent study of language and the recognition of the primordiality and importance of the intersocial verbal relationship have offered science real possibilities to observe, direct, perfect, treat or modify this complex tool of relationship.

Summarizing the information on language acquisition provided by the specialized literature, we can identify 4 main stages:

- preparatory (up to 1 year). The first vocal reactions (screaming, crying) appear in the child. They contribute to the development of the movements of the verbal apparatus. By two months, the baby understands stroking, cooing appears - combinations of articulated sounds. From 5 months, he starts imitating the articulation of those around him, repeating sounds and consolidating them. From the age of 6 months, the child begins to pronounce separate syllables, acquires the tonality, rhythm, tempo, intonation of speech. After 7 months, certain combinations of sounds are perceived, which the child associates with objects and actions ("tick-tock", "boom!"); the child reacts to the whole complex of influences - intonation, words. From 10-11 months, he reacts to the words and individual intonations of the speaker, and it is of great importance, the appropriate reaction of those around him. Towards the end of the first year, the first words appear.

- preschool (1-3 years). The stage of active speech formation, when the child repeats what he hears and speaks a lot in his autonomous language, confusing and distorting sounds. The first words are of a generalized semantic nature (the word denotes both an object, a request, and a feeling) - this is situational speech, accompanied by gestures and facial expressions. From the age of 1.5 years, the word acquires a generalized character, begins to understand verbal explanations, expands the vocabulary and assimilation of knowledge. At 1.5 years, the active stock is 30-34 words, at 2 years - 300 words, at three years it reaches 1000 words. In the third year of life, the grammatical structure of speech is formed. The child expresses his wishes first in a word, then in simple sentences, without attributing the words. By the age of two, children's master cases, singular and plural. Children understand more than 1000 words and understanding words develops pronunciation skills.

- preschool (up to 7 years). An incorrect pronunciation of hissed phonemes and blown phonemes is still maintained, but auditory control over one's own pronunciation is developing - the phonemic perception of the sounds of the native language. By the age of 4-5, the child should be able to differentiate all sounds (phonemic perception). The vocabulary grows, by the age of 6 it is 3-4 thousand words, and he becomes aware of their meaning, even if, often, the words are used incorrectly (saying "coo" instead "school"). During that period, the child tries to form/create new words. The grammatical structure of speech develops, children master coherent speech by the age of 3. By the age of 4, the structure of simple sentences is established. At the age of 5, complex and subordinate sentences appear. The child can tell a story of 40-50 sentences, which indicates the mastery of monologue speech. The phase of correct emission of sounds ends and contextual speech develops - generalized, without visual support.

-school age (from 7 to 17 years old). We witness a conscious assimilation of language in a semantic context; children acquire sound analysis, learn grammatical rules for constructing sentences. Written language appears.

The development of vocabulary in children largely depends on the environmental conditions in which the child develops and especially on the cultural level of the family. Thus, it is explained that the norms for measuring the number of words differ from one author to another, but in general they all declare that the vocabulary of the older preschooler should count approx. 3000 -3500 words or more, as claimed by E. Verza and E.F. Verza (2017).

This is how language education takes place and the vocabulary expands if there are no deviations from the standardized language, from the typical, unanimously accepted verbal manifestations in the common language, both in terms of reproduction and perception. If the child meets difficulties, starting from the dysregulation of the various components of the word to the total impossibility of oral or written communication, it means that it is a language disorder.

Language and communication disorders are on the rise in frequency and intensity, a phenomenon that leaves deep imprints on the dynamics of personality development of preschool children. D. Ponomari (2019) finds that language disorders mark the evolution of aspects of language phonetic, lexical, lexico-grammatical, lexico-semantic, and affect communication and interrelationships, personal, verbal and action behaviour, affecting overall verbal behaviour. A problem confronting children with language disorders, besides the psychological problems (high emotivity, lack of self-confidence, timidity etc.) there are also weak performances to acquire the school curriculum and, particularly, to acquire the *reading-writing language*. Research by young authors in the Republic of Moldova has highlighted the impact of language disorder on the level of psychological training for school. L. Chitoroga (2019) reveals the impact of reading-writing language disorders on students' learning skills, which are manifested by learning difficulties, because writing and reading once acquired are transformed from learning goals into learning means, and if the means are damaged, the result will be just right. O. Popescu (2019) argues that language disorder is a disintegrating condition from the perspective of effective school adaptation, and that ameliorating intervention at high preschool age contributes to equalizing intra- and interpersonal abilities and social integration of children with language disorders;

Scientific studies confirm that psychological preparation for school depends on the level of language development, as well as on the psycho-pedagogical intervention programs applied during the preparation for school. V. Olărescu (2020) mentions that the activities of learning to read and write are some of the most complex, because they involve a multitude of imported cognitive processes: language, attention, memory, visual processing of graphic symbols, as well *as phonological processing*. The analysis and synthesis of the scientific literature helped us to establish the direction of our research; we set out to evaluate the development of the premises for reading and writing in preschoolers involved in research. The main aims of this research consists in identifying the development of the premises for reading and writing; determining dyslexic-disgraphic predispositions in preschool children.

# 2. Research methodology

#### 2.1. Participants

80 subjects with phonological disorder and 80 subjects with typical development participated in the ascertaining research.

## 2.2. Method

The test Burlea (2007) consists of eight tests that will be presented to the child, asking the child: *Test 1* - to name 6 familiar images provided by the speech therapist; *Test 2* - to graphically complete the images proposed by the model; *Test 3*- to observe and name the spatial orientation of the objects in a picture; *Test 4* - to discriminate the orientation of graphic schemes; *Sample 5* to arrange the images in chronological order based on the subject shown in the images; *Test 6* - to continue writing the graphic elements according to the model; *Test 7* to notice the direction and orientation of the objects presented imagistically; *Test 8* to compose and tell a story, based on the sequences shown in the pictures.

As a result, 15 points will be deducted from the total obtained if there is a dislalic disorder. The maximum score that can be accumulated is 121 points:

- 90-121 without dyslexic tendencies;
- 40-90 risk of dyslexie-disgrafie;
- 0-40 predisposing symptoms.

## 3. Results

The test revealed the difficulties faced by preschoolers. A look at the average of the results by category of preschoolers informs us about the tests with higher difficulty and vice versa; at the same time, we may notice who has better developed premises for writing. *Fine hand motricity skills* and *Sensing the direction and orientation of objects*, high weight writing and reading skills, estimate an equal gap of 7 units between phonological disorder (PD) and typical development (TD), which is significant. Only in the *Image Name* subtest, the average of the results is the same for both groups of preschoolers.

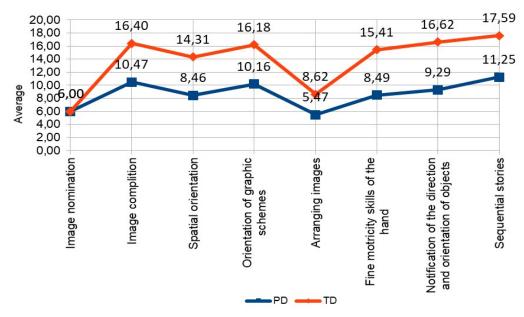


Figure 1. Average score, Burlea test, subjects with PD and TD

Data processing demonstrates statistically significant difference in all subtests summarized in Table 1: Image completion (U = 5892; p <0.001), Spatial orientation (U = 6135.5; p <0.001), Schema orientation graphics (U = 6285; p <0.001), Arranging images (U = 6150.5; p <0.001), Fine hand motor skills (U = 6378; p <0.001), Notice the direction and orientation of objects (U = 6371.5); p <0.001) and Sequential Stories (U = 6342; p <0.001). TP (U = 6976.00; p <0.001); M (U = 6976.00; p <0.001). The effect size is very high (r bis = 0.84-0.99), which emphasizes the statistical significance.

		Ave	rages	Mann-		Effect size (r biserial)	
	Tests	PD	TD	Whitney U	р		
Burlea Test	Image nomination	6,00	6,00	3200,00			
	Image complition	10,47	16,40	5892,00	< 0,001	0,84	
	Spatial orientation	8,46	14,31	6135,50	< 0,001	0,92	
	Orientation of graphic schemes	10,16	16,18	6285,00	< 0,001	0,96	
	Arranging images	5,47	8,62	6150,50	< 0,001	0,92	
	Fine motricity skills of the hand	8,49	15,41	6378,00	< 0,001	0,99	
	Notification of the direction and orientation of	0.20	16.62	(271.50	< 0.001	0.00	
	objects	9,29	16,62	6371,50	< 0,001	0,99	
	Sequential stories	11,25	17,59	6342,00	< 0,001	0,98	
	ТР	69,60	111,14	6376,00	< 0,001	0,99	
	Average	8,70	13,89	6376,00	< 0,001	0,99	

 Table 1. PD / TD performance and differences, Burlea test

Statistical analysis of the data obtained shows that the statistical difference retains its value regardless of gender. Also, the value of the effect size is very high, falling to> 0.71. Therefore, we point out that children with PD are reluctant to develop the prerequisites for reading and writing at all levels and represent a risk for the occurrence over time of pronounced dyslexic-dysgraphic predispositions compared to children with TD.

Based on the qualitative analysis of performance in terms of premises for writing and reading we may claim the following: preschoolers with PD are opposed to preschoolers with TD! Test 1 Image names, is an exception, exactly the same, which demonstrates a good visual recognition, the images being familiar to children of both categories. In the other tests we report disproportions, mismatch between situations. In test 2 Completion of images, children with PD showed a lack of observation, as well as difficulties in noticing the details that make up the image, difficulties in perception and spatial orientation, repeated errors in test 3 Spatial orientation; test 4 The orientation of graphic schemes is an important test that highlights the specific nature of typical dyslexic-dysgraphic mistakes, preschoolers with PD have confused the orientation of spatial relationships left-right, up-down, visual perception disorders, difficulties in analysis and synthesis of visual forms, difficulties in concentrating attention and again the lack of observation; at test 5 Arranging the images, the most frequent mistakes made were the reversal of the natural order of the sequence of images, which signals difficulties in the sphere of analyticalsynthetic abilities of ordering and organizing sequences in a serial processing; test 6 Fine *motricity skills of the hand* - reveals the development of fine motor skills through the qualifier below the pass limit, not being included in the workspace provided, imprecise shapes; test 7

Noticing the direction and orientation of objects is the item with the greatest difficulties in execution, as children have often made confusions about the spatial orientation of objects, as well as their direction on the page. The test once again highlights perceptual and spatial orientation disorders and attention difficulties; test 8 *Sequential stories* - there are oral language disorders, inadequate morpho-syntactic structures, lack of coherence of ideas in the logic of events, lacunar verbal expression; written language disorders correlate with various disorders of oral language in terms of name, lexical evocation, correct organization of the message in appropriate morphosyntactic structures. Following the correlation between the semantic content of the sentences formulated by the subjects and the meaning induced by the image, a total discrepancy is found. From the point of view of lexical structures, poor and limited vocabulary is observed.

We must mention that there were many obstacles in the performance of the test, and for the group of preschoolers with PD they were highly insurmountable. The hypothesis was confirmed.

#### Speech therapy intervention

In the speech therapy intervention, we developed and carried out a set of activities focused on teaching strategies, which included exercises, games and techniques in order to develop the premises for reading and writing.

Each age represents a qualitatively new stage of psychic development and is characterized by a multitude of changes, "which together form the specificity of the child's personality structure at the given stage of his development". The transition from one stage of age development to another is related to the change of the dominant activity. The dominant activity is an activity in which other activities appear and differentiate, including new activity, which becomes dominant at the next stage of age development.

Preschool age is the age of all possibilities, only it needs a good direction, either direct or indirect (from the shadow) from the adult, obviously when the child's psycho-physical development evolves according to age standards established by scientific analysis and synthesis. The dominant activity of the age is a game and through / in the game preschoolers acquire the social norms of human conduct.

The elaboration of the integrative psycho-speech therapy program was based on the study of the tangential works of various authors (Nosatâi, 2006; Ponomari, 2019; Popescu, 2019). We were also interested in the psychological and pedagogical intervention programs with preschool children of the authors (Cojocariu et al., 2017; Veleanovici, 2015), with the intention of finding efficient and fast elements of working with children. The methodological works (Benga, 2012; Filipoi, 2012; Hatcher et al., 2014; Olărescu, 2020), guided us in the technology of conducting psycho-therapeutic sessions with preschoolers.

In the intervention program designed to develop the premises for writing-reading in children aged 6-7 years (Cognitive Behaviour module), we took into account age, age characteristics and deviations, language impairments, cognitive, emotional, and psychomotor aspects. Given that the dominant activity is play, all activities are based on games, exercises, psychological techniques, accessible to children with phonological disorders. In designing the Cognitive Behaviour Module, we have included exercises, games and techniques in order to develop the premises for reading and writing.

We have always been guided by principles such as:

- consecutive - carrying out activities in a consecutive and gradual order, from simple to compound;

- the confluence of speech therapy with psychological methods for children - the activities of training the correct pronunciation skills, language development are integrated in learning contexts that require other related psychic functions, other than those involved in articulating sounds (psychomotor, perceptual, mental organization, communication, memory functioning, socialization) and are associated with methods, techniques or procedures with a psychotherapeutic role, ensuring the complex nature of the entire psycho-speech therapy intervention;

- favorable communication climate - ensuring a pleasant and learning-friendly environment;

- *the dominant activity* - the organization of the therapeutic process based on the dominant form of activity - the game, an effective means by which the preschooler gets in touch with the world, understands the surrounding events, learns from them and practices his new acquisitions;

- diversification - diversified use of methods and techniques of psycho-speech therapy.

We grouped the stages and objectives of the intervention for educating the premises of writing and reading in a consecutive order and the logic of the formation from simple to compound, through a series of special exercises, simple and complex graphics, drawing. Finger development should begin with the child's participation in activities such as *modeling*, *drawing*, *building small objects*. These occupations develop different hand movements, coordinating the action of the hand and the eyes. Drawing also has a special role because it involves the use of pen-like objects, while accustoming the child to sitting in the correct position.

During the writing practice the child must acquire the basic graphic skills: to learn *to draw vertical, horizontal and oblique straight lines*. Once you learn to draw straight lines in different directions, you can start *drawing wavy and broken lines*. These exercises will prepare you for more complicated tasks, such as *contouring, drawing, copying drawings, drawing in squares, and writing on lines*.

A total of 24 children with phonological disorders participated, divided in two groups – experimental (EG) and control (CG). The homogeneity of the groups was statistically confirmed using the *U-Mann-Whitney test*.

*Hypothesis:* we assume that through the psycho-speech therapy program we managed to form premises for reading and writing and dyslexic-dysgraphic predispositions will be less pronounced in EG compared to CG, and between groups there will be statistically significant differences in terms of test scores.

To begin with, we examined the results obtained in the test-retest stage by the subjects of the participating groups. The data showed an increase in the average values in the test samples, at the retest stage in both groups (Table 2) highlighting the EG preschoolers. EG subjects obtained the following average values at each test sample, test / retest: sample *Image Name*: M1 = 6.00; M2 = 6.00; *image completion* test: M1 = 10.08; M2 = 15.42; *Spatial orientation* test: M1 = 8.00; M2 = 15.08; *Discrimination of graphic schemes test*: M1 = 9.50; M2 = 15.75; *Arranging images* test (temporary orientation): M1 = 5.42; M2 = 9.00; *Fine motricity skills* test: M1 = 9.08; M2 = 15.42; *Notification of the direction and orientation of objects* test: M1 = 8.50; M2 = 16.00; *Sequential stories* test: M1 = 10.17; M2 = 18.00.

Subjects from CG to test/retest have shown progress in tests average values, but these were not relevant: *Image name* test: M1 = 6.00; M2 = 6.00; *image completion* test: M1 = 9.17; M2 = 10.17; *Spatial orientation* test: M1 = 7.67; M2 = 9.00; *Discrimination of graphic schemes* test: M1 = 10.00; M2 = 10.17; *Arranging images* (temporary orientation) test: M1 = 5; M2 = 5.33; *Fine motricity skills* test: M1 = 7.42; M2 = 8.08; *Notification of the direction and orientation of objects* test: M1 = 8.67; M2 = 9.17; *Sequential stories* test: M1 = 11.33; M2 = 12.17. Figure 2 illustrates the changes in the experimental group / control group.

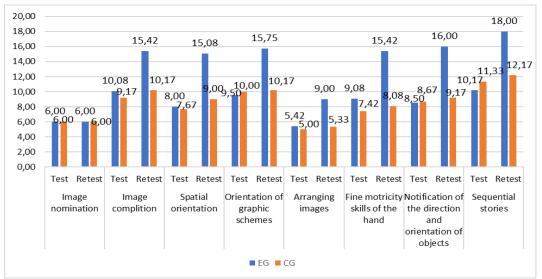


Figure 2. Average results of the Burlea test, EG / CG, test-retest

The *Wilcoxon* test highlighted the statistically significant difference between EG and CG, test / retest, and clearly delineated the EG jump: *Completion of images* (V = 78.00; p = 0.002); *Spatial orientation* (V = 78.00; p = 0.002); *Discrimination of graphic schemes* (V = 78.00; p = 0.002); *Arranging images* (V = 78.00; p = 0.002); *Fine motricity skills of the hand* (V = 78.00; p = 0.002); *Notification of the direction and orientation of objects* (V = 78.00; p = 0.002); *Sequential stories* (V = 78.00; p = 0.002).

On the other hand, CG preschoolers also saw statistically significant progress on the following items: *Completion of images* (V = 45.00; p = 0.006); *Spatial orientation* (V = 66.00; p = 0.003); *Fine motricity skills of the hand* (V = 36.00; p = 0.005); *Sequential stories* (V = 28.00; p = 0.014). In the tests *Discrimination of graphic schemes*, Arrangement of images and Notification of the direction and orientation of objects of preschool CG did not register statistically significant differences, which may be explained by the complexity of the evidence and the need to involve higher level mental structures.

In the *Image Name item* there were no data variations, the results being placed at the same level, at the test / retest stages.

	EG				CG			
Burlea Test	Test M1	Retest M2	V	р	Test M1	Retest M2	V	р
Image name	6,00	6,00	-	-	6,00	6,00	0,00	-
Completing images	10,08	15,42	78,00	0,002	9,17	10,17	45,00	0,006
Spatial orientation	8,00	15,08	78,00	0,002	7,67	9,00	66,00	0,003
Discrimination of graphic schemes	9,50	15,75	78,00	0,002	10,00	10,17	7,50	0,317
Arranging images	5,42	9,00	78,00	0,002	5,00	5,33	17,50	0,102
fine motor skills of the hand	9,08	15,42	78,00	0,002	7,42	8,08	36,00	0,005
Notification of the direction and orientation of objects	8,50	16,00	78,00	0,002	8,67	9,17	10,00	0,063
Sequential stories	10,17	18,00	78,00	0,002	11,33	12,17	28,00	0,014

Table 2. Average of results and Wilcoxon test at Burlea test items, EG / CG, test / retest

Note: Empty cells appear due to lack of data variation.

At the test stage, the results of the Burlea test between EG and CG did not show statistically significant differences, the groups being homogeneous, but at retest, between EG and CG, statistically significant differences appear, at the tests: *Completion of images* (U = 0.50; p <0.001); *Spatial orientation* (U = 0.00; p <0.001); *Discrimination of graphic schemes* (U = 0.00; p <0.001); *Arranging images* (U = 0.00; p <0.001); *Fine motricity skills of the hand* (U = 0.00; p <0.001); *Notification of the direction and orientation of objects* (U = 0.00; p <0.001); *Sequential stories* (U = 0.00; p <0.001). At the same time, the value of the magnitude of the effect of statistically significant differences, mentioned above, is at a high level (values r bis between 0.99 and 1.00), which accentuates the magnitude of the difference, the share at the practical level.

We deduce that the premises for writing-reading have been highlighted/ outlined, the risk and predisposition to dyslexic-dysgraphic disorders have been minimized: the fine motor skills of the hand have been perfected, they are spatially oriented, the graphic schemes are different.

At all trials we recorded statistically significant differences at the retest stage between EG and CG, in favor of EG, which indicates the effectiveness of the intervention program. However, CG preschoolers in the *Completing Images, Spatial Orientation, Fine Hand Motricity and Sequential Stories* tests also perform statistically significant differences, which is explained by the continuity of the educational entourage, even if it is not strong enough.

The impact of all samples at the practical level, in the context of differences between groups, is expressed by the high value of the effect size, r bis $\geq 0.99$ .

#### 4. Conclusions

In conclusion, we can say that the results of the Burlea test of experimental group of preschoolers compared to control group, after completing the integrative psycho-speech therapy program, prove skills of analysis and visual synthesis, and higher temporal-spatial orientation. Also, they manage to organize their work space, establish the correlation between the semantic content of the formulated sentences and the meaning induced by the image. EG preschoolers have developed the necessary and useful skills at school because of the program; the risk of predispositions to reading and writing disorders has decreased.

The re-evaluation of the development of the premises for reading and writing indicates the improvement and overcoming of children's difficulties in writing / copying graphic elements, to orient themselves spatially, to compose and tell stories, etc., so that we attest to statistically significant differences between experimental group and control group.

#### References

Bodea Hațegan, C. (2016). *Logopedia. Terapia tulburărilor de limbaj. Structuri deschise* [Speech therapy. Therapy of language disorders. Open structures]. Bucharest: Trei Publishing House.

Benga, O. (2012). Jocuri terapeutice [Therapeutic games]. Cluj-Napoca: ASCR, 2012.

- Burlea, G. (2007). *Tulburările limbajului scris-citit* [Disorders of written-reading language]. Iasi: Editura Polirom.
- Chitoroga, L. (2019) *Dificultăți de învățare a limbajului scris la elevii din ciclul primar: diagnostic și intervenție psihologică.* Teză de doctor [Difficulties in learning written language in primary school students: diagnosis and psychological intervențion. Doctoral thesis]. Ion Creanga State Pedagogical University of Chisinau.
- Filipoi, S. (2012). *Basme terapeutice pentru copii, adolescenti si parinti* [Therapeutic fairy tales for children, teenagers and parents]. ASCR Publishing House.
- Hatcher, P.J., Duff, F. J., & Hulme, C. (2014). Sound Linkage: An Integrated Programme for Overcoming Reading Difficulties, 3rd Edition. Wiley-Blackwell.
- Cojocariu, V.M., Mâță, L., Boghian, I., Lupu, C., Savin, P. (2017). Jocuri didactice minunate din diferite izvoare adunate, Auxiliar curricular pentru cadrele didactice (debutante) din

învățământul preșcolar [Wonderful educational games from various sources collected, Curriculum support for (beginner) preschool teachers]. Bucharest: Miniped Publishing House.

- Nosatâi, A. (2006). Pregătirea psihologică către școală fundamentul succesului școlar al copiilor cu tulburări de limbaj [Psychological preparation for school the foundation of school success of children with language disorders]. *Didactica Pro*, 2-3 (36-37), 83-85.
- Olărescu, V. (2020). Scrierea și citirea: Intervenție logopedică preventivă și formativdezvoltativă [Writing and reading: preventive and formative-developmental speech therapy intervention]. Chișinău: Printing House "Pulsul Pieții".
- Ponomari, D. (2019). *Dezvoltarea comunicării la copiii preșcolari cu tulburări de limbaj:* teză de doctor în psihologie [Development of communication in preschool children with language disorders: doctoral thesis in psychology]. Chisinau, Republic of Moldova.
- Popescu, O. (2019). *Integrarea socială a copiilor cu tulburări de limbaj*. Teză de doctor [Social integration of children with language disorders. Doctoral thesis]. Chisinau: Ion Creanga State Pedagogical University of Chisinau.
- Veleanovici, A. C. (2015). Tulburări emoționale la copiii aflați în situație de abuz și neglijare. Teza de doctor [Emotional disturbances in children in a situation of abuse and neglect. Doctoral thesis.]. Chisinau: Ion Creanga State Pedagogical University of Chisinau.
- Verza, E., & Verza, E.F. (2017). *Psihologia copilului* [Child psychology]. Bucharest: Trei Publishing House.