

SÉRIE “VZDĚLÁVACÍ TECHNOLOGIE”

[https://doi.org/10.52058/2695-1592-2022-3\(10\)-76-83](https://doi.org/10.52058/2695-1592-2022-3(10)-76-83)

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INDICATORS OF SPEECH DEVELOPMENT IN CHILDREN WITH AUTISM SPECTRUM DISORDERS

Abstract. In scientific work, the theoretical analysis on the problem of studying the indicators of speech development in children with autism spectrum disorders. The purpose of the study is a theoretical study of features of speech development in children with autistic spectrum disorders. Objectives of the study: to highlight the theoretical analysis of the scientific literature, both classical and modern research, on the problem of study; consider the causes of autism, the causes of speech disorders, and features of speech development for children autistic disorders; described species according to the International Classification of Diseases. As a result of scientific and theoretical research it was determined that depending on the specifics of disorders and the degree of lesions of the cerebral cortex, speech development in children with autism spectrum disorders have its own characteristics; the variability of speech development is determined; revealed a different levels of development of speech depending on the type of autism. The study described different groups of children with autism spectrum in the determine development of their active speech. Children in the first group have speech disorders due to mental retardation. Speech disorders in children of the second group are characterized by a delay in the organization of consciousness. In children of the third group, speech disorders of catatonic symptoms were observed. Speech disorders due to mental regression are observed in the fourth group. Speech disorders in the fifth group of children are associated with the



pathology of the associative process. Delay in speech development, depleted vocabulary, unclear, meaningless, limited speech, the presence of echolalia, agrammatism, lack of motivation to communicate, communicative deprivation, requires a special training and correction approach.

Key words: children with autism spectrum disorders, speech, speech disorders.

Formulation of the problem. Speech is an important mental component, its formation during educational activities provides the child with certain knowledge, skills and abilities.

Modern information saturation requires the child to initiate verbal involvement through the perception of the surrounding reality (phonemic perception), its reflection (programming in internal speech), memorization (vocabulary formation) and further use (sound and grammatical design). In addition, an important aspect of the incorporation of the child into the social space is its communicative development. Unformed speech readiness in children with autism spectrum disorders affects the level of children's mastery of the curriculum in special educational institutions and relationships with children and the environment. The theoretical analysis of the study will identify groups of children with autism spectrum disorders; consider the peculiarities of the development of their speech depending on the severity and complexity of violations.

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Analysis of recent research and publications. In special psychology and pedagogy, the causes of disorders (Bashina, 1993; Skrypnyk, 2010; Tarasun, 2016; Jackson, 1950, etc.), features of development (Bettelheim, 1967) of children with autism spectrum disorders, their mental (Tuganbekova, Arbabayeva, & Madetova 2016; Cunningham, 1968, etc.) and speech development (Bazima, 2014; Sheremet, & Kondukova, 2010; Sviderskaya, 2018; Carr, 1985; Ekstein, 1964; Tager-Flusberg, 1995 etc.). Describes diagnostic methods (Bashina, 1993; Rutter, 1978 etc.), educational (Freeman, & Dake, 1997 etc.) and corrective work on speech development (Bazima, 2014; Shulzhenko, & Andreeva, 2011 etc.) and communications (Bazima, 2014; Garfin, & Lord, 1986; Jordan, 1993, etc.). Scholars also point to the importance of motive in communication (Koegel, & Koegel, 1995 etc.), and consider the development of speech by modifying behaviour (Lovaas, 1977; Lovaas, Simmons, Koegel, & Stevens-Long 1973 etc.).

The purpose of the study is a theoretically study the indicators of speech development in children with autism spectrum disorders.

Presenting main material. There are various theories and assumptions about the occurrence of autism in children: genetic predisposition; weak X- chromosome; oversaturation of the hormone testosterone in men (influence on the development of the left hemisphere); genetic conflict (the excessive activity of male genes); pathology of the neurexin-1 gene and the gene on chromosome 11; lack of Cdk-5 protein; the influence of external factors on the child's brain during fetal development, at birth, in the first years of life; effect on the brain structures of heavy metals, etc.

According to the International Classification of Diseases (ICD-10), autism spectrum disorders include childhood autism (F84.0), atypical autism (F84.1), Rett syndrome (F84.2) and Asperger's syndrome (F84.5).

According to researchers (Bazima, 2014 [1]; Ostrovskaya, 2012 [2]; Tuganbekova, 2016 [3]; Shulzhenko, 2011 [4]; Jackson, 1950 [5]; Jordan, 1993 [6]; Koegel, Koegel, 1995 [7], etc.), the level of cognitive development in children with autism may be different: from deep intellectual disorders to talent in certain areas of knowledge. Usually, such children are sensitive, abusive, prefer subject concentration, ignoring human relationships. Well-developed emotional memory influences the stereotyping of the world around us. They have speech problems, deviations in the development of motility, attention, sensations, perception and other cognitive and emotional processes.

Tuganbekova (2016) and other scientists note that autistic children have difficulty with establishing emotional connections with the people around them [3]. This is due to special disorders of their mental development and features of speech: delay in the development of expressive speech (M. Cunningham, 1968) [8]; the presence of echolalia; non-survival of the personal pronoun "I"; stereotypes of speech; non-use of dialogue (B. Bettelheim, 1967; M. Rutter, 1978 etc.) [9; 10]; lack of motivation to communicate (L. Koegel, R. Koegel, 1995) [7]; lack of speech in many children with autism (N. Bazima, 2014) [1].

Speech in autistic children according to studies scientists (Carr, 1985 [11]; Freeman, & Dake, 1997 [12]; Garfin, & Lord, 1986 [13]; Tarasun, 2016 [14]; Sheremet, & Kondukova, 2010 [15] etc.), has different variability in severity and manifestations. According to this statement, scientists have identified groups of children by the development of their speech activity. *Children in the first group* have speech disorders due to mental retardation. This leads to the late realization of pre-speech reactions, although the first words appear much earlier than in typical development; words do not always correspond to the features of the object, person, actions but are they pronounced clearly, intonationally. Lag in speech development in



this category of children begins at the end of the second year of life. Later, some of them lose their speech and use only sounds, vocalization, and muttering during communication. If the external speech in them is disturbed, then the internal remains preserved and subsequently develops.

Speech disorders in *children of the second group* are characterized by a delay in the organization of consciousness. The main signs of speech immaturity appear from an early age. It is then observed a slow pace in the development of pre-speech reactions. In two or three years, the first words appear that do not have a specific meaning and do not provide phrasal speech with meaning. There are constant violations of sound pronunciation (permutation of sounds in words); speech rate (slow pace, echolalia); speech motivation (lack of motivation to communicate); vocabulary (the dictionary is depleted, replenished slowly); in the construction of sentences (agrammatism, absence of prepositions, adjectives, personal pronouns, verbs mostly in the indefinite form, words do not change in gender and number), etc.

In children of *the third group*, speech disorders of catatonic symptoms were observed (verbigeration, echolalia, egocentrism, mutism, chanting, different pace, etc.). First, the rapid development of speech is outlined: from 6 to 12 months, the first words appear; from 12 to 16 months – the first sentences (grammatically complex); the fast rate of vocabulary enrichment; independent reasoning; understanding of spoken language. At the same time, children with early autism have problems with communication space, as their speech includes stereotypes (imitation of adult speech), interest-only in emotionally coloured speech, long monologues (on interesting topics, dialogue – not active children are not ready for speech interaction with other people), complex grammatical constructions, sound comprehension of the word; word-formation. Speech in children in this group has its own characteristics: voice tension (increased muscle tone), fast pace, unspoken endings in words, omissions or replacement of sounds, slurred pronunciation.

Speech disorders due to mental regression are observed in *the fourth group* of children, which at the initial stage of early childhood approaches the indicators of their peers with typical psychophysical development. However, in the third year of life (from 2.5 years) speech activity is inhibited, and this process lasts until the end of preschool age (5-6 years). Speech regression leads to the impoverishment of the active vocabulary (passive preserved); grammatical expressions (compared to persons with intellectual disabilities), the disappearance of phrasal speech, late use of the personal pronoun; the appearance of echolalia; speech disorders. Researchers (Skrypnyk, 2010; Tuganbekova, 2016; Tager-Flusberg, 1995, etc.) [16; 3; 17] also claim that children with autism in this group, focusing on the emotional component of speech, are able to correctly and clearly pronounce sounds in words; they are characterized by extreme sensitivity to the structure of the word (correct use of

syllables in the word); the pace of speech is usually slow, stuttering is possible; understanding of spoken language is at a high level. Preschoolers are interested in the semantic characteristics of speech, its emotional and rhythmic structure (like poetry). In addition, they lack a response to the social world, which serves as a protective mechanism against imaginary danger (Jackson, 1950; Ekstein, 1964) [5; 18].

Speech disorders in the *fifth group of children* are associated with the pathology of the associative process (violation of the semantic understanding of speech in the form of incomplete, inconsistent associations, contamination, etc.).

Scientists (Bazima, 2014 [1]; Swiderska, 2018 [19]; Lovaas, 1977 [20]; Lovaas, Simmons, Koegel, Stevens-Long 1973 [21], etc.) argue that due to the educational and corrective impact, children with early autism have the opportunity to master basic communicative functions: expanded phrasal speech (without focusing on individual situations), as well as socio-emotional skills (reporting their emotions, initiative during communication, etc.). This greatly facilitates the interaction of children with their loved ones.

Speech preparation of children with early autism for school depends on the severity and manifestations of their speech underdevelopment. Delay in speech development, depleted vocabulary, unclear, meaningless, limited speech, the presence of echolalia, agrammatism, lack of motivation to communicate, communicative deprivation, according to researchers, requires a special training and correction approach.

Conclusions. Analysis of the theoretical study of the problem of speech development in children with autism spectrum disorders showed: 1) the existence of various theories and assumptions about the occurrence of autism in children; 2) autism spectrum disorders according to the International Classification of Diseases include: childhood autism, atypical autism, Rett syndrome and Asperger's syndrome; 3) depending on the complex lesions of the cerebral cortex, speech in this category of children is determined by specificity; from the development of speech activity they were divided into groups. It is determined that the lack of speech components, problems in communication, lack of motivation to communicate for this category of children requires a special educational and corrective approach.

The prospect of further research is the study of speech readiness for schooling of older preschool children with speech pathology.

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