

THE DEVELOPMENT OF COMMUNICATION AS A CONDITION FOR INCLUSION OF CHILDREN WITH AUTISM IN EDUCATION

S. Alekhina, E. Soldatenkova

Moscow State University of Psychology & Education (RUSSIAN FEDERATION)

Abstract

On the basis of research at the Center for psychological, medical and social support for children and teenagers "Kashenkin Meadow" Moscow City Psychological and Pedagogical University, a literature review on the autism spectrum disorders (Vygotsky L.S., Leontiev A.N, Bogdashina O.B., Nikolskaya O.S., Shipitsina L.M., Gilbert K., Peters T., Kanner L., Cumine V., Leach J., Stevenson G., Sparrow S.S., Balla D.A., Cicchetti D.V. and others), the authors consider particularly urgent need to organize activities for children with autism spectrum disorders and their parents, primarily aimed at the development of communication, which should primarily be focused on the system of meanings and values. Scientists emphasize the importance of self-examination, self-correcting, self-control children with ASD in relation to his own speech, in the situations of interaction and understanding on the part of adults and peers.

As a result, done positive conclusions about the prospects of their proposed recommendations.

The article presents a generalized description of the communication of children with autism, based on literature review and field research. Based on the literature review the authors identify some types of communicative in children with autism, they also list the radicals of communication disorders. The article discusses the results of a field study to assess the level of formation of expressive and impressive communication in children with autism aged 3–9 years. A quantitative and qualitative assessment of the characteristics is described. The principles for development of the communication of children with autism are highlighted. The authors give the recommendations for development of orientation in communicative material and for selection of ways of communication, such as speaking, writing, pictographic writing, pictures (photos), gestures etc, to develop the speech in children with autism. They define the conditions for inclusion of children with autism in education that described in terms of cultural-historical psychology and activity theory.

Keywords: autism, inclusive education, communication, cultural-historical psychology, activity theory, children with autism.

... Communication falls into the same category food and protection - it is necessary for life. Without communication, life becomes useless ...

Anne McDonald

The present stage of development of society has set the education system global goal, caused by political, social and economic factors. Ratification of the Convention on the Rights of the Child (13.06.1990) on the Rights of Persons with Disabilities (03.05.2012), the Charter for persons with autism (10.05.1992) are not intended to enable persons with disabilities new human rights, lack in universal conventions on human rights, but require improvement of existing and introduction of new mechanisms to ensure the rights of people with disabilities and creating conditions for their social integration.

Becoming urgent task of qualitative change of educational space with the aim of tailored to the needs and the needs of all children without exception. In 2012, the Russian law adopted the concept of "inclusive education" as access to education for all children, taking into account their special educational needs and individual characteristics, first identify children with autism spectrum disorders in a separate category of children with disabilities.

The problem of inclusion of children with ASD in the general education is extremely important, because this category of socially is not sufficient, not only because of the initial violation, one of the characteristics of which are "qualitative impairments in communication, delay or full stop in the development of speech" [8], but also because of "social dislocation" that is, the lack of necessary conditions for its development [5].

Marked the question of violations of communicative interaction as the subject of a separate special study is one of the most significant steps in exploring the education of children with autism spectrum disorders and demonstrates the importance of communication as a factor in the pathogenesis of mental disorders in autism - breakdown in communication "reinforce specific behavioral characteristics of children with autism "(Peters, Gilbert, 2002), which are aggravated by a second misunderstanding adult desires and needs of the child [6].

Long period of time regularities of violation of communicative interaction in children with autism have not been studied or studied only in organic connection with the analysis of the structure and dynamics of clinical psychopathological phenomena. So, only the third stage in the development of autism - kannerovsky (40-80 years) was marked by the first mention of a speech disorder that L. Kanner (1943) described as a symptom complex of infantile autism [17]. He drew attention to the specific use of pronouns and verb forms and "delayed echolalia", which is expressed in a literal repetition of questions keeping not only words but also intonations.

Later L. Bender (1952) described other options - mechanical modulation of voice, features its height and tone [13].

B. Hermelin and O'Connor (1970) drew attention to the fact that children with autism do not integrate current experience with previous ideas, but remember better than children with developmental delays. Although semantic memorization in children with autism is not better mechanical. Those scientists have paid attention to reduce the level of formation of the grammatical structure of speech in children with autism [16].

T. Shapiro and G. Ginsberg (1971) identified predominance of echolalia and simultaneous combination of "incomplete" and "mature" speech [18]. V.M Bashina (1974) explained this phenomenon by the fact that "for children with autism characterized by uneven ripening fields of activity, violation of a hierarchical relationship between simple and complex structures within each functional system, the lack of effects displacement as is the norm, primitive structures more complex" [2].

Modern researchers [12] are the following radicals inherent in children with ASD communicative violations (that is not a consequence of developmental delay or speech disorders):

- Delay, stop or regress speech development without any compensation due to the use of gestures;
- Violations of non-verbal communication (body language, facial expression);
- The lack of speech or violation of articulatory aspect of speech;
- The lack of response to the speech of others in their own name;
- Stereotyped speech; echolalia, the unconscious repetition of another's words and phrases, melodies of songs; the use of ordinary words in an unusual value; difficulty understanding the meaning and use of concepts;
- Long-term naming himself in the second or third person.

The practice of working with children with ASD confirms that communication disorders are not smoothed with a child growing up, but only exacerbate behavioral disorders. Under natural conditions of life in the absence of specially organized training the child with ASD becomes excluded from the environment, not only because of behavior problems, but it is impossible to understand the others and tell them about their needs. The limited capacity to use communication tools drawn attention O.B Bogdashina: "People with autism ... have no shortage of communicative intention, but they have limited ability to use verbal and non-verbal means" [3].

Above certain characteristics of communicative disorders in children with ASD are confirmed by us and the data field research conducted on the basis of the Moscow City Psychological and Pedagogical University. The aim of the study was the identification and description of the features of the communication of children with autism spectrum disorders....

As a part of study, data were obtained about the level of formation of communicative skills of 102 children with ASD aged 3 to 9 years, were given the quantitative and qualitative evaluation of these indicators. The basis for entered data in the data of the study was the presence of the studied child the autism spectrum disorders - with typical symptoms or atypical features. The age of subjects (from three to nine years) - a period of time when the new formation that was analyzed by us should be formed in accordance with the regulatory parameters of age.

For examination of the level of communicative skills used a standardized questionnaire - Scale Adaptive Behavior by Vineland (Sparrow, Balla, Cicchetti, 1984). Extending the methodology to evaluate the level of communication of children with ASD was due to the fact that for the traditional rating scales of development of communication was added more parameters characterizing the breakdown in communication in children with ASD.

The model of research includes the collection of information on several areas of development (scale). Especially carefully was analyzed the data on the scale of "Communication", exactly subscale:

- Receptive skills (how the child understands);
- Expressive skills (how the child says);
- Writing skills (how the child reads and writes).

The results that were obtained by research of every child were compared with an average age norm.

Thus, during the study were obtained the following statistics (see Table 1):

Statistical analysis of research material			
Communication skills			
Levels of Communication	Receptive skills	Expressive skills	Writing skills
Low level	52% (53 persons)	76% (78 persons)	48% (49 persons)
Below the average	23% (23 persons)	10% (10 persons)	27% (28 persons)
Average level	24% (24 persons)	13% (13 persons)	21% (21 persons)
Above average	2% (2 persons)	0% (0 persons)	2% (2 persons)
High level	0% (0 persons)	1% (1 person)	2% (2 persons)

The analysis of results showed that 76% of children with ASD in this age have a low level of expressive speech. As a rule, it is non-verbal children, and children with vocalizations (intoned or unmodifiable); situationally determined whether or not bearing semantic load speech; Hyperlexia; children whose speech characterizes the so-called "bird language", with disorders and articulation praxis.

The low level of understanding of speech noted in 52% of children with ASD (53 persons of 102). Another 23% of children researched group have a level of understanding of speech "below average". Thus, 75% of the researched children with ASD have a reduced ability to understand speech in the communication process.

The level of communicative development, corresponding to average rate, noted only 13% of the researched children. However, their communication is characterized by: autonomy; non-use or misuse of personal pronouns and verb forms, due to delayed emergence of consciousness "I"; catatonic symptoms (egocentric, decaying, inner speech, chanting, stretched or rapid pronunciation, paralinguistic violations tone, pace and tone of speech ...). At the same time some children, impressed of communicative intact, there is the use of speech only under certain conditions, for example in response to the whispered speech (in children with elective mutism) or referred to in emotionally situations ("affective speech"). The above data substantiate the assertion by O.B Bogdashina that children with ASD have "qualitatively different ways of interaction, communication and information processing, which are not identical with the generally accepted" [3].

Highest rate on a scale of "Writing skills" explained tendency of children to Hyperlexia (Eng. - Hyperlexia) - hypertrophied interest of the children with ASD to the symbols, global memorizing characters. At the same time, according to our research, the average level of development of writing skills is correlated with the average level of development of receptive skills and quantitatively about the same (24% and 21%). This good result is due to the fact that it was organized a very good work with these children, directed to the formation of the skill of meaningful use of signatures for communication.

Thus, we can conclude most of the children with ASD aged 3 to 9 years, who participated in our research:

- Lack of verbal communication - 78% of respondents (and 10% with the characteristic "below average");
- Decrease in speech understanding - 52% of respondents (and 23% of the characteristic "below average").

The results of this study led us to understand the need to organize special classes for children with autism, aimed at the development of communication. In addition, we have organized training for parents of inclusion of these activities in daily life situations of children, as communication difficulties a child with ASD is largely due to the social character.

Thanks to the historical and cultural heritage of the concept and activity approach has gained a good of information of facts and studies, based on which it can be quite meaningful to develop communication in children with ASD. Communication here is considered not as a system of response, but as the system is active, targeted actions that are implemented using the means of communication, the choice of which, given the wide range of communicative disorders should be variative and determined by the capabilities of the individual child. To implement it should be in the process of developing process with the child, focused on the formation of a more universal communication, thus creating maximum conditions for the development of speech of a child with ASD through the development of auditory attention, praxis articulation, self-awareness, and so on. Traditionally used systems with non-verbal children with ASD are based on behavioral approach [14] and do not focus on these tasks.

You should also pay attention to the fact that these techniques [14] suggest instrumental learning. In this case, the child with ASD is not formed an idea that a word - the base sense certain meaning, the children with ASD with such training remain the difficulties in the use and understanding of word forms and pronouns. After all, learning a set of models of communicative interaction out the solution of practical problems does not allow children with ASD to use with confidence communication in the future. Meanwhile, the development of communication should be focused on the development of a system of meanings, values. In 1934 L.S Vygotsky in his "Thinking and speech of the child" refers to mastering ways to use characters as the main factors of development [4]. Among the ways to use the signs they have been allocated different levels of generalization, including **синкреты. (это случайное, неупорядоченное множество предметов?)**. These techniques generalizations are common for the children with ASD - they are based on a random appearance, emotional and evaluative similarity, external proximity. And without specially organized training children with ASD remain at this level. For example, a boy with ASD whenever feeling scared, says "postman". At the same time, analyzing the previous experience of the child, we find out that the boy was once a very frightened when the stranger came into the house. The fixed emotion of fear has been designated by the word "postman" (rather than the word "scared"), which his mother said in this situation. In the absence of speech, this difficulty appears in unformed understanding of reverse speech: during the sounding appeal a child does not understand the meaning and perceives sound like noise, background, something insignificant. Therefore he is not responsive to treatment.

Based on the methodology of cultural-historical theory, research by .L.S. Vygotsky and his followers, the results of our research and data experience working with children with ASD, we believe that any elementary communicative action involves orientation in the system of values that are the same for inclusion in the communication of people. And communication development should focus on the development of such a system of values. Begin work on the development of the system of values in children with ASD is expedient to select the communication tools. At the initial stage as a communication tool to be used photographic images of favorite and actually necessary for the child's life items with a propaedeutic introduction signatures to them. (needed the symbolic designations, do not differ from those of a child with ASD uses in real life. For him, the cup - not any cup, but, for example, it is red.) This will be the basis for the formation of writing, which later becomes the externalization of support for the development of a more universal communication - namely, oral speech. This work necessarily have to be supplemented by exercises for the development of auditory attention, phonetic and phonemic perception, articulation praxis and self-awareness in a child with ASD.

Where L.S. Vygotsky points to mastering ways to use characters as the main causes of human development, A.N. Leontiev [9] noted the need mastery of human actions and their values, which are

mediated by symbolic and symbolic means. He drew attention to the fact that the internal plan of action with the ideas and values first organized external (with other people), followed by internal means.

Thus, by A.N. Leontiev, the processes use the subject of values initially formed in external interactions with the child's world of objects and people, and only then become internal form. From the beginning, carried out with an adult and under the supervision of an adult action, including communicative, develops a child's orientation in particular its correct implementation. Therefore, the psychological study of the development of communication of children with ASD - an analysis of:

- As a means of communication are included in a variety of mutual actions of an adult with a child;
- Start to be used as a child in a relatively independent actions;
- Such actions acquire the character is not joint actions, and actions for themselves and get a mental form of implementation;
- As a means of communication are becoming aware of the child.

Formation of plants on orientation in communication materials in a child with ASD can be achieved the following tasks:

- Sight-hearing child focus on sounding speech and reactions of the adult; the possibility of imitation as substantive actions and speech;
- Actions on the model: the child performs an action after the show adult way of its implementation;
- Action through the voice of experience: floating associations, recall communication patterns (stereotyped phrases);
- Actions by analogy: orientation internally with the possibility of transformation of the sample;
- Orientation to the "sense of language" - an intuitive generalization of the use of communication standards on the basis of knowledge of how communicates guesses about successful and unsuccessful actions.

Mandatory condition for orientations of this type is their attachment to the situation of interaction with an adult. Samples of the teacher should be correlated with the situation, reflect the motives of a child with ASD, and to have a personal meaning for him. It can be: from understanding the situation of teachers (worse - confusion) desires and intentions of the child; a situation where the child is on the emotional rise due to the "emotional contamination" (children's slide, soap bubbles ...); joint substantive action with adults and peers.

Necessarily in the work on communication development of children with ASD need to pay attention to the external characteristics of speech: the clarity of pronunciation of the sound structure of words, correct syllabic structure, the ability of the child to coordinate words in sentences, to formulate simple statements; to overcome echolalia; to respond to attempts to establish communication with other people, such as understanding gestures of another person; in response to interactive situations such organization and initiation of the dialogue; the peculiarities of communication in different contexts.

It is important to form the attention of the child with ASD to his speech at the level of sounds, syllables, words, sentences; it is important to teach him to correlate their actions with the standard and to predict success / failure of their own actions (work on self-analysis, the formation of self-management skills, self-correction of errors).

Consequently, the development of communication of children with ASD requires constant answer the following questions:

- How to make a choice of communication tools to communicate values in communicative action;
- How this communication tool can take a child with an ASD specific value.

Answers to these questions will affect not only the trajectory of communicative development of the child, but also for its educational route, providing or not providing its inclusion in a broader social space.

Many years of practice of working with children with ASD at the Centre "Kashenkin Meadow" Moscow City Psychological and Pedagogical University allows positively judge about viability and effectiveness of these recommendations. Noticed that such attention to the choice of the means of communication

and semantic component of words further transferred to an interest in the operation of the laws of language and promotes the formation of "a sense of the language," and learning to use linguistic resources in different types of human action and interaction, as opposed to mastering sufficient set models, enables communication with confidence.

REFERENCES

- [1] Alekhina S.V. The principles of inclusion in the education practice // Autism and Developmental Disorders. 2013. № 1 (40).
- [2] Bashina V.M., Simashkova N.V. The peculiarities of the correction of speech disorders in patients with the syndrome of infantile autism. Moscow, 1995. p. 361–363.
- [3] Bogdashina O.B. Communication in Autism: Do we speak the same language? (Lecture for students, professionals, parents, children autism) [electronic resource] // Siberian Vestnik special education. URL: sibsedu.kspu.ru/index.php?option=content&task...288.
- [4] Vigotcsky L.S. Thought and language. Moscow; Leningrad: State Teaching and Learning Publishing House, 1934. 324 p. [Electronic resource]. URL: <http://psychlib.ru/mgppu/VMr-1934/VMR-001.HTM#>.
- [5] Vigotcsky L.S. 1. Basic problems of modern defectology // Collected Works. Volume 5: The Basics of Defectology. Moscow: Pedagogy, 1983.
- [6] Gilbert K., Piters T. Autism: medical and educational impact. Moscow: VLADOS, 2002. 144 p.
- [7] 7. Children with autism. Reader: textbook for students of higher and secondary educational, psychological and medical schools / compiled by LM Shipitsina. 2nd edition, revised and enlarged. St. Petersburg: Publishing House of the "Didactics Plus", 2001, 368 p.
- [8] Summary adapted version of the International Statistical Classification of Diseases and Related Health adopted by the 43rd World Health Assembly. 10th Revision [electronic resource]. URL: <http://mkb-10.com>.
- [9] Leontiev A.N. Problems of development of the psyche. Moscow: Publishing House of the Academy of Pedagogical Sciences of the RSFSR, 1959. 496 p.
- [10] Malanov S.V. Development of skills and abilities in preschool children: Theoretical and methodological materials. Moscow: Moscow psycho-social institution; Voronezh: Publishing House of the NGO "MODEK", 2001. 160 p.
- [11] Nikolskaya O.S., Baenskaya E.R., Libling M.M. Autistic child. Ways to help. Moscow: Terevinf, 2009. 288
- [12] Chuprikov A.P. Autism spectrum disorders: medical and psycho-pedagogical assistance / A.P Chuprikov, A.M Khvorova. 2nd edition. Lvov: MS, 2013. 272 p.
- [13] Bender L. Schizophrenia in childhood. A Confirmation of the Diagnosis // Transactions of the American Neurological Association. 1952. Vol. 77. P. 67–73.
- [14] Bondy, A. A picture's worth: PECS and other visual communication strategies in autism / A. Bondy & L. Frost. Woodbine House, 2002.
- [15] Cumine V., Leach J., Stevenson G. Autism in the Early Years. A practical Guide. London: David Fulton Publishers, 2000.
- [16] Hermelin B., O'Connor N. Psychological experiments with autistic children. Oxford: Peramon Press, 1970.
- [17] Kanner, L. (1943). Autistic disturbances of affective contact // Nervous Child. Vol. 2. P. 217–250.
- [18] Shapiro T., Ginsberg G. The Speech of a Schizophrenic Child From Two to Six // American Journal of Psychiatry. 1971. Vol. 128. P. 1408–1413.
- [19] Sparrow S.S., Balla D.A., Cicchetti D.V. Vineland Adaptive Behavior Scales: Interview Edition. Survey Form Manual. Minnesota: American Guidance Service, 1984.