Creating conditions for the sustainability of communicative competencies

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Abstract. The study is devoted to the psychological and pedagogical problems of the formation and stability of communicative competence necessary for the effective development of children with special educational needs, including severe multiple developmental disorders, the structure and features of the state of communicative competence are considered, the features leading to the inferiority of this competence are identified: the lack of formation of speech activity and its components that participate in communicative interaction between people, difficulties in determining the potential of communication skills in children with severe multiple disabilities, difficulties in determining the uniqueness of the personal and communicative development of children of the studied category at different stages of education, as well as conditions for the formation and stability of this phenomenon in children with severe multiple developmental disabilities receiving education in preschool and school periods. Among the main conditions for the stability of this phenomenon are the definition of an algorithm for the formation of communication skills in different types of activities; the presence of team communicative interaction of all subjects of the educational process. The continuity of the accompanying process is substantiated as the basis for the formation and further stable result of communicative competence in children with severe multiple developmental disorders.

1 Introduction

In modern special education, the competence approach is actively developing, which involves the formation of key competencies - a system of universal knowledge, skills, skills, accumulation of experience in independent activity and understanding of the responsibility of each individual who is in the system of education at different levels – preschool, school, professional. One of the important key competencies – communicative – is one of the qualitative indicators of personality development, which underlies a successful and sustainable process of socialization, self-actualization, social recognition. Mastering communicative competence involves mastering such abilities as understanding the system of knowledge about yourself and about people around you, various skills of strategies used in social situations that allow you to build productive sustainable, interpersonal communication

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in accordance with the goals and conditions of communicative interaction. But in relation to
the formation of this competence in children with disabilities, in particular with complex
complex disorders, there is no unambiguous understanding and definition of the conditions
for its development in scientific sources, which allows for further scientific research [1-4].

In the course of the analysis of domestic and foreign sources, it was noted that
communicative competence presupposes the development of skills and abilities: to show
initiative and come into contact with people around, show the positive desire for
communication with them; be able to ask questions and adequately answer them in the topic;
in communication, kindly conduct a conversation, accurately and concisely expressing the
thoughts, listen and hear, understand the interlocutor, who also wants to provide his vision
of the topic of communication, thus forming a feedback, reading the emotional attitude of a
communication partner, to manage his own and other people's non-verbal and expressive
means of communication; effectively cooperate, mastering communication models, speech
genres and means to achieve the goal in individual or group communication [9, 10, 12-14].
In the psychological and pedagogical literature, the ontogenesis of communicative
competence in neurotypical children and adolescents is noted, which is presented in the works
of Lisina M.I., Kolominskiy Ya.L., Feldshtein D.I., who noted the importance of close
environment, parents, teachers and peers and close relationship of various types of activity
in the formation of the studied phenomenon. With regard to the issue of the formation of
communicative competence in children with special educational needs, with difficult
complex disorders, the researchers note that this phenomenon is an important component of
correctional and developmental education, and the emphasis is always on the formation of
speech activity, since speech allows becoming a means that will allow talking about your
condition, to exchange views and ideas. Therefore, in some researches, separate directions
and forms of correctional and developmental work are proposed, which focus on the
development of speech and non-speech means in various types of activity, but which may be
deprived of continuity between preschool and school levels of education [4, 8, 9]. We
identified the features that led to the lack of formation of communicative competence: most
of the children of the studied category were unable to independently master active speech,
the accumulation of passive speech was also significantly hampered due to the violation of
the mechanism of their general psycho-physical development and social-personal
development. At the same time, the parents of these children do not expand the types of
communicative interaction, limiting themselves to solving their physical needs, they are only
in a very narrow circle of communication and with very few contacts in the outside world [1,
4, 10].

This problem is acute first among preschoolers and then among schoolchildren with
multiple, severe intellectual disabilities (F71, F72). Experts emphasize that this category of
children is the most dually vulnerable in terms of the development of communicative
competence. Children of this category, due to their complex characteristics, cannot enter into
communication with society, and society, in turn, does not understand how to enter into
communication with them, understand their needs. At the same time, persons of the studied
category have a wide variability of pathological manifestations in the motor, emotional,
cognitive, speech spheres, which leads to significant difficulties in choosing methods of
pedagogical influence, organizing psychological and pedagogical support aimed at the
formation and development of communicative competence, as the basis for their successful
socialization.

Thus, we have identified the problems of finding a model for the formation of
communicative competence in conditions of socio-psychological and pedagogical support in
an integral educational vertical – from preschool to school – based on an understanding of
complex disorders and individual developmental potential of children with severe multiple
developmental disorders, the presence of a special algorithm of pedagogical influence on the
development of the studied competence in the process of various types of activities, in the classroom and outside of educational activities

**Purpose of the study:** search for ways to improve the communicative competence of children with severe multiple developmental disabilities, aimed at optimizing the process of social adaptation.

**Research objectives:**
1. To describe the problem of the formation of the communicative competence of children with severe multiple disabilities who study at the preschool and school stages of education.
2. To develop and test a diagnostic complex for studying the features of communicative competence in various types of activities, determining the understanding of the individual communicative capabilities of children.
3. To carry out an experimental study of the state of communicative competence in various types of activity and its main components, as well as to determine the psychological and pedagogical conditions that contribute to the optimization of the processes of communicative development, correction and successful social adaptation of students with severe multiple developmental disorders.
4. To define continuity as a methodological principle of modeling the system of formation of communicative competence in various types of activity and its main components in children with severe multiple developmental disabilities.

**The research hypothesis** is based on the assumption that the organization of psychological and pedagogical support for the formation of communicative competence in various types of activities in children with severe multiple developmental disabilities should be continuous throughout preschool and school education. At the same time, it is necessary to take into account the state of communicative competence, which includes a number of competencies - cognitive, speech and emotional, psycho-physiological nature; have a professional culture of team interaction in educational organizations.

**Research methods** included: **theoretical** – analytical and synthetic work on the study of data presented in general and special pedagogical, psychological, methodological literature. The following methods were used as research methods: special carrying out of diagnostic techniques aimed at studying communicative competence in different types of activity – play, educational; observation of the ways of communicative interaction between peers using verbal and non-verbal means of communication; **methods of processing the results** – mathematical analysis, statistical data processing, content analysis, using IT tools.

**Organization of the study.** The study was carried out in three stages in the period 2015-2020.

At the preparatory and organizational stage, the following were carried out: search and development of a methodological basis for the study, the formation of a contingent of research subjects, organizational and methodological support of the study. At the second stage (ascertaining part) of the study, the diagnosis of communicative competence and its components - cognitive, speech and emotional, psycho-physiological - was carried out in students with severe multiple developmental disabilities attending preschool and school educational institutions. At the third stage of the study (summarizing), the results were summarized and analyzed.

The group of subjects-respondents included 140 children. The study of the state of communicative competence was carried out in educational organizations of the cities of Moscow (5 institutions) and Ryazan (2 institutions). Among the research subjects – students of educational organizations, two subgroups were identified (taking into account the level of education): preschool – 70 pupils, aged 2 to 7 years (G1); school – 77 students, aged 9 to 12 years (G2).
The contingent of this group of children was significantly polymorphic in the structure of a complex defect and included from three to ten combinations of diseases in each child. The structure of disturbances in the subjects was represented by: infantile cerebral palsy and their forms; the presence of pronounced delays in mental development, mild, moderate and total mental underdevelopment; severe systemic speech disorders, sensorimotor alalia, rhinolalia, dysarthria, stuttering; sensory impairments – sensorineural hearing loss and deafness, partial atrophy of the optic nerve, low vision, blindness; the presence of autism spectrum disorders, atypical autism; various genetic diseases – Down syndrome, Martin-Bell syndrome, Refsum disease, Marfan, Prader-Willi, and Cornelia de Lange syndromes, tuberous sclerosis, etc.; concomitant diseases – neurological (epilepsy, neurotic conditions), endocrinological (cystic fibrosis, etc.), somatic disorders [2].

As a result of the search stage of the study, the following features of the development of children were revealed in terms of the severity of violations: 19 children with a mild degree, 52 children with an average, and 69 children with severe ones.

2 The main content of the study

At the organizational and methodological stage, we have identified effective conditions that contribute to the successful formation of the following competencies:

– cognitive and informational competence, reflecting the understanding by children with SMDD (severe multiple developmental disorders) of the meaning of the subject and the idea of the conversation taking place in the process of activity and awareness of these issues;

– activity and regulatory competence, reflecting the purposeful and voluntary organization of one's behavior in accordance with the communicative situation in children of the studied category;

– speech competence, which characterizes the qualitative state of speech and non-verbal means of communication at all its levels in children with SMDD, which is necessary in the establishment of constructive communicative interaction;

– motivational and need-based competence, which allows establishing positive emotional characteristics of understanding communicative interaction in the process of activities of children with SMDD.

Among the main conditions contributing to the formation of communicative competence, we identified: the presence of continuity of the accompanied process, the uniformity of the interdisciplinary approach of specialists at all stages of education – preschool and school; the mobility of the relationship of specialists when informing a parent and building an educational route for a child with SMDD in order to develop this phenomenon.

As a key diagnostic method, the “Comprehensive diagnostic card of psychological and pedagogical study of children with disabilities” was used [5-7]. This card allows for a comprehensive assessment of the communicative behavior of each of the children participating in the experiment. We have identified the following criteria for assessing communicative interaction during the game: 0 points characterizing a very low level – the absence of any result of communicative interaction, the presence of inadequate reactions during communication; 1 point – low level – communicative interaction with the interlocutor manifests itself for a short time, on the basis of short statements that do not contain any sentences and statements, speech statements are unproductive and are not the subject of common activity, emotional responses to communication partners are minimal and not always adequate to the situation; 2 points – average level – the child's communication skills are unstable, communicative interaction with the interlocutor allows for a variety of information messages and statements, non-verbal means of communication are used little, speech does not accompany subject-play activity, emotional responses to communication
partners are minimal and not always adequate to the situation; 3 points – high level – communication skills of children with SMDD are stable, all components are sufficiently formed.

In the ascertaining part of the study, we obtained data on the characteristics of competence. A generalized quantitative characteristic is presented in Figure 1.

Fig. 1. The ratio of the components of communicative competence in children with SMDD with different levels of development

The first group, which showed a low level of development of communicative competence, included 48% of the subjects. Their communicative interaction had to be supported by a high emotional background in order to attract children's interest in object-play activities. They refused to enter into communicative contact and showed negativism. Children have no verbal communicative activity, they are silent, do not support verbal communication, and do not perform tasks. They do not have a dialogue, their speech has no direct focus, their statements are very minimal, they are not very informative for a partner. The presence of affirmative or negative verbal units was observed. In general, they poorly maintained eye contact with their peers, the game is short-lived. This was associated with high exhaustion, distraction, appearance. Children with SMDD used a small number of non-verbal means of communication – gestures of greeting, exchange of toys, they rather tried not to ask for the necessary teaching aids or toys, but to take away – all this contributed to the emergence of conflict situations and led to negativism and ignorance on the part of peers. The game had the character of a “next standing child”.

The second group, which showed an average level of development of communicative competence, included 45% of children with SMDD. They come into immediate contact with difficulty, not for a long time and not stable. Children formally obey an adult, phrasal speech is partially communicative, rarely ask questions addressed to other persons, but sometimes they can answer completely and correctly, partially maintains a dialogue for a short time. They were more contact and developed a larger repertoire of emotional manifestations, actively used non-verbal gestures and pantomimes, only in accordance with the given educational and play conditions. It was difficult for children to keep attention on the object of activity for a long time, but they quickly got tired and slowed down the pace of activity. The subjects partially understood the game situation, but did not exchange ideas and suggestions for the development of the plot, were inactive. Speech utterances had a question-and-answer form, information about the subject of the game or lesson was conveyed very fragmentarily and represented ready-made speech patterns. The game had the character of a “jointly acting partner”, but subordinate and performing the proposed game and training actions.

The first group, which showed a high level of development of communicative competence, included 7% of children with SMDD. Their nature of contacts is long-term,
stable, phrasal speech has a communicative orientation (independently asks questions, actively participates in the dialogue). The children included in the group were very emotional, used a wider range of non-verbal means, kept eye contact with the interlocutor, conveyed emotional states well, necessary in the game or in the classroom, understood the game situation well, allowed single options for the exchange of their ideas and suggestions for the development of the plot, showed great motor activity, if problem situations arose, they made conclusions aloud and found new solutions.

When organizing a training experiment aimed at the formation of communicative competence in educational and play activities among preschoolers with SMDD, we worked in the following directions (Fig. 2.).

![Fig. 2. Algorithm for the formation of communicative competence in children with SMDD](image)

After the training, the generalized characteristics of the components of communicative competence significantly change (as a percentage of the total number of children). This dynamics confirms the thesis about the continuity of accompanying parents, families, in the course of the educational process.

This dynamics confirms the thesis about the need to organize psychological and pedagogical support for children with SMDD in the course of the educational process. Research has shown that the following components are most vulnerable in the development of communicative competence: speech (verbal – 30%; non-verbal – 50% as a percentage of the total number of children) – for pupils with SMDD, speech is not a tool for interaction and communication about anything, moreover, the need for its mastery is greatly reduced; the cognitive and informational component is a connecting link in communication – there is a subject of conversation, there is an idea how to use it, there is information about what it consists of – among pupils of the studied category (very low – 40%). The basis for communicative interaction is only the activation of the emotional component (50%), which is the leading and basic one in establishing communication and is stimulated in the process of any activity by a teacher or parent.

When assessing this component in other age groups, the transition to schooling differs significantly. The study of schoolchildren with SMDD showed that their features of communicative competence studying in classes for children with a complex defect are characterized by non-verbal, mixed and verbal contacts. Based on the composition of the classes for children with SMDD, these features are presented in Figure 3.
Fig. 3. Characteristics of communicative competence among pupils with SMDD.

At the beginning of the assignments, 35% of students (27 people) showed interest, 26% (20 people) are worried, alert, 13% (10 people) showed excessive excitement, familiarity with an adult. Motor and speech stereotypes were observed in 5% (4 persons), 21% of students (16 people) experienced apathy, showed no interest in work, were indifferent.

Speech contact was chosen by 41 people – 53%, mixed 17 people – 22%, non-verbal – 19 people – 25%. “Speech” students, regardless of other violations, when establishing contact with an adult, use only speech and do not enter into any tactile or gestural communication with him. Communicative contact is characterized as long-term and stable throughout the study. Children actively participate in the process of interaction with an adult, phrasal speech has a communicative focus (they independently ask questions, participate in a dialogue).

Fig. 4. Features of communicative competence in schoolchildren with SMDD.

The speech of children who prefer mixed contact is imperfect, they mainly use separate simple phrases, words and use types of alternative communication. Most often, communication is initiated by an adult, although students show an interest in him, and joint contact can be long and stable. They are characterized by the establishment of tactile contact with the teacher. For example, they can touch his hand, and at the same time pronounce a word, thus attracting attention. Partially formed phrasal speech has a communicative orientation, but the activity is reduced (they rarely ask questions addressed to other persons or do not ask themselves, but answer completely and correctly, keep the dialogue).

Non-verbal contact is used by children who do not use speech, or “speechless”. Non-verbal contact dominates in learners with complex disabilities, including mental retardation and ASD. In some children, in the process of everyday communication, there are separate vocalizations, or sound combinations, only vaguely reminiscent of words that are incomprehensible to others. In general, communication is of a short and unstable nature, and
the child formally obeys the adult, does not show interest, experiences significant difficulties in making contact in order to attract attention, these children try to catch the eyes of an adult, touch the hand, look into the face, actively gesticulate [6, P.63].

Analysis of verbal communication showed the following: 17% of students (13 people) use phrasal speech, actively participate in the process of interaction with an adult, phrasal speech has a communicative focus (they independently ask questions, participate in a dialogue), 21% (16 people) participate in the process of interaction with an adult, phrasal speech has a communicative orientation, but the activity is reduced (they rarely ask questions addressed to other persons or do not ask them independently, but answer completely and correctly, keep the dialogue). In 28% (22 people), phrasal speech with a decrease in the communicative orientation is noted (they do not answer questions, do not ask questions on their own, one-time comments are possible during the course of the study as a monologue); 25% (19 people) have phrasal speech with a significant decrease in the communicative orientation (there is no dialogue, speech does not have a direct communicative orientation, only rare attempts to make contact are noted); 9% (7 people) have no verbal communicative activity (the child is silent, does not support verbal communication, does not perform tasks).

3 Results

At the third, forming stage, the obtained results were generalized, conclusions were drawn about the need to develop communicative competence from the preschool level of education, defining the learning algorithm in the classroom, in game activities and in independent spontaneous communication; maintaining continuity in the psychological and pedagogical support of parents raising children with SMDD in order to consolidate the acquired skills and work out in new conditions outside a preschool institution or school; determination of the uniformity of the interdisciplinary approach of specialists [15-17]. We have noted that in the entire vertical of education, from preschool to school, there is a change in the state of communicative competence in each of its components. The greatest change occurs in the speech (verbal and non-verbal) components, the emotional and motivational component changes insignificantly, the cognitive and informational one hardly finds its realization when this phenomenon is activated. Positive changes can be facilitated by a team of specialists who carry out continuous and systematic complex psychological and pedagogical influence on the communicative competence of children with SMDD in order to further successful socialization.

References

References

1. V.V. Tkacheva, I.A. Katkova, Features of the psychological basis of reading mentally retarded schoolchildren with complex developmental disorders (Moscow, Ser. Scientific thought, 2021)
2. O.V. Shokhova, Psychodiagnostic and correctional technologies for children with developmental problems (Moscow, Sputnik +, 2012)
4. E.G. Carr, Behavioral approaches to language and communication. In E. Schopler & G.B. Mesibov (Eds.), Communication problems in autism (New York, Plenum, 1985)
7. A. Eremina, O. Shokhova, E. Firsova, Innovative technologies in science and education (Moscow, Rostov-on-Don, Russia, 2020)
8. O.V. Shokhova, I.A. Katkova, Implementation of the principles of continuity and continuity of preschool and school education of children with severe multiple developmental disorders in Continuous inclusive education: theory, history, methodology: Materials of the XI International Theoretical and Methodological Seminar, Moscow, March 25, pp. 29-33, 2019, Moscow, Paradigm