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Study of Social Behavior in Younger Schoolchildren with SMDD during Non-School Activities

Angelina G. Korabelnikova* (a)

(a) Moscow State Pedagogical University, 119571, Moscow (Russia), 88 Prospect Vernadskogo, emily_9393@mail.ru

Abstract

Study problem. The group of individuals with severe and multiple disorders included children who had moderate, severe or profound mental retardation in combination with other developmental disorders. Studying the adapted basic general educational program by students implies that they achieve two types of results: personal and subjective, which, in turn, requires learning the norms of social behavior in addition to subject components within the educational environment. This leads to an incomplete understanding by parents of the possibilities of teaching a child socially appropriate behavior, which, in turn, reduces the adaptation abilities of children in the society. The relevance of the study is determined by the growing interest of the society in teaching younger schoolchildren with severe multiple developmental disorders socially acceptable skills, developing a psychological line of social behavior as an active adaptation to the conditions of social environment. The purpose of the study is theoretical substantiation and scientific and methodological development of conditions for the formation of social behavior in younger schoolchildren with SMDD.

The study involved 35 younger schoolchildren with severe multiple developmental disorders. It has been experimentally proved that students with SMDD are characterized by low (52%) and critically low (25%) competence in social behavior. A qualitative analysis of the actions of students in life situations shows that they better comprehend tasks, which are simple every day and communicative actions. Students are least competent in ways of acting in situations that require seeking help from adults. The results of the study can be used in: 1) the development of scientific and methodological guidelines for teachers for planning and implementation of a work system on the formation of social behavior 2) the preparation of practical materials for parents on the formation of socially acceptable behavior (in the family, in public places, in transport). 3) the implementation of study materials in the course of teachers’ practical training.

Keywords: children with severe multiple disorders, mental retardation, social behavior, educational standard, non-school activities.

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* Corresponding author. E-mail: emily_9393@mail.ru
Introduction

Currently, the issue of including children with severe multiple developmental disorders into social interaction with the outside world is one of the main issues in the system of special education and upbringing. One of the most important tasks of the state policy of both education and social development in the Russian Federation is to create special conditions and ensure the implementation of the right of children with special needs to receive education (Andreeva, 2014).

Teaching a child with severe multiple developmental disorders (SMDD) in the modern first stage educational environment involves creation of an optimal educational space, which provides conditions and opportunities for upbringing and education of the child, formation of his/her overall culture consistent with generally accepted moral and sociocultural values, based on the development of personality and practical ideas, skills and abilities necessary for personal fulfillment and life in the society, allowing the student to achieve the greatest possible self-sufficiency and independence in everyday life (Lindsay & Tsybina, 2011).

Analysis of the study of children with SMDD. The group of individuals with severe and multiple disorders includes children who have moderate, severe or profound mental retardation in combination with other developmental disorders (sensory, musculoskeletal, disorders of emotional-volitional sphere, including autism spectrum disorders). The leading place in the structure of planned learning outcomes belongs to personal outcomes, since it is they that ensure mastery of the complex of social (vital) competencies necessary to achieve the main goal of modern education: introduction of students with mental retardation (intellectual disabilities) into culture and their mastery of sociocultural experience.

Younger schoolchildren with SMDD, due to limited understanding of the world around them, weakness of speech contacts, immaturity of interests, and reduced need for speech communication, do not transfer the ideas and skills formed in the learning process into their own activities, which, in turn, does not facilitate the use of acquired ideas and skills for living in the family and society.

Purpose and objectives of the study

The purpose of the study is theoretical substantiation and scientific and methodological development of conditions for the formation of social behavior in younger schoolchildren with SMDD during non-school hours.
Literature review

Analysis of the study of social behavior. Social behavior is defined as a set of behavioral processes associated with the satisfaction of physical and social needs and arising as a reaction to the surrounding social environment. In domestic psychology, the problem of social behavior is represented by studies of psychological schools of Rubinstein (1960) and Leontiev (1981). Modern domestic sociologists (Afanasiev et al., 2010) consider social behavior as social actions of individuals or social groups. Social behavior in the aspect of its deviation from the norms is the subject of studies by Nikolskaya et al. (2000).

Persons with severe and multiple developmental disorders should be psychologically prepared in the learning process for adaptation in new conditions, which are characterized by specific circumstances and situational character (Klin et al., 2007).

When teaching social skills on which social behavior is based, a number of problems arise, such as:

- lack of basic ideas and understanding by the parents of the opportunities of teaching their child socially adequate behavior during non-school hours (in the street, in public places, in public transport, in situations of safety when crossing the road, etc.);

- weak activity of the educational process integration, an insufficient number of programs aimed at teaching children the norms of social behavior during non-school hours;

- an insufficient number of educational work programs, the lack of a system of methods facilitating the mastery of social behavior by children with SMDD (Groundet al., 2010).

The relevance of the study is determined by the growing interest of the society in the field of teaching younger schoolchildren with severe multiple developmental disorders socially acceptable skills, developing a psychological line of social behavior as an active adaptation to the conditions of social environment through the assimilation and adoption of goals, values, rules, norms and patterns of behavior accepted in the society and digestible by this group of students. The psychological and pedagogical problem of the child’s socialization and formation of his/her personality outside the educational institution come to the forefront, since their intellectual potential does not ensure their assimilation and independent use of social, community-based and other forms of life (Golovchits, 2015).
Methodology

The methodological bases of the study are:

- Cultural and historical theory of development (Vygotsky, 1978);

- The provision on the generality of the laws governing the development of the child normally and with developmental disabilities (Vygotsky, 1978);

- Theories of social behavior in psychological schools of Rubinstein(1960) and Leontiev(1981);

- The theory of social cognition by Andreeva (2014);

- Concepts of formation of social behavior in sociology Afanasiev(2010),

- Theoretical and methodological provisions and methodological work in the field of education and training of children with intellectual disabilities Golovchits (2015) and Malofeev (2010).

Study methods: Analysis of domestic and foreign studies in the field of special education for children with SMDD, theoretical analysis of sociological, psychological and pedagogical ideas, development of a concept and means for its implementation; pedagogical experiment (ascertaining, formative, control); psychological and pedagogical diagnosis; expert evaluation; and qualitative and quantitative data processing.

Experimental base of the study

Municipal Budgetary General Education Institution, school № 904 in Moscow, the block “Atmosfera” for children with special needs was the experimental base of the study.

The study involved younger schoolchildren from 8 to 12 years old with multiple developmental disorders. The experimental group consisted of 25 children with intellectual, sensory, motor and behavioral disorders. The compare group consisted of 10 children studying in elementary school under other programs. All children have medical reports on their health status, including the presence of disability and the conclusions of an individual rehabilitation and habilitation program. In total, 60 people took part in the study: 35 children, 20 parents, and 5 employees of the educational institution (teachers, speech pathologists, speech therapist, and psychologist).
Stages of the study

The study of social behavior in younger schoolchildren with SMDD is performed in four stages:

- at the first stage, a theoretical analysis of the existing methodological approaches in special psychological and pedagogical scientific literature, thesis papers on the problem, as well as the theory and methodology of pedagogical studies by domestic and foreign authors was performed; the problem, purpose, and study methods were identified, and the experimental study plan was drawn up;

- at the second stage, a comparative study was performed on the competence of socially acceptable behavior in students with various levels of intellectual development (children with moderate mental retardation and children with SMDD);

- at the third stage, a program is developed for the formation of socially acceptable behavior in primary schoolchildren with SMDD; its goals and objectives, principles, approaches and conditions for implementation, methodological tools and organizational forms are identified.

- The fourth stage experimentally verifies and proves the effectiveness of the program for the formation of socially acceptable behavior in younger schoolchildren with SMDD in the pedagogical practice. A quantitative and qualitative analysis of the results is performed.

The study involved 35 younger schoolchildren with severe multiple developmental disorders.

**Results**

**Ascertainning stage**

To establish the level of actual development of the child and his/her social behavior, we performed the ascertainning and comparative stages of the experiment. The main objectives of the study were identified, and the method of the ascertainning experiment was developed.

The goal of the ascertainning stage of the experiment was to identify the features of social behavior in domestic, family and public institutions.
The tasks of the ascertaining stage of the experiment are:

To develop a diagnostic map for evaluating the processes of studying the features of social behavior, which would allow us to fully investigate various aspects and components of this function in children with intellectual deficiency and would be applicable to children with different levels of disease severity.

To perform a comprehensive diagnosis of the processes of socially acceptable behavior in SMDD, to identify certain patterns typical of children in this category, to compare the results with the results observed a sample of children with a mild degree of intellectual deficiency.

Collection of information about the children, their level of current development and social behavior included:

- Analysis of their history and medical documentation (types of disorders, the presence of complex disorders);

- Analysis of social conditions of the child’s development (the presence of other children in the family, the way of communication in the family: verbal, or using alternative communication means);

- Analysis of psychological and pedagogical characteristics;

- Questioning of group teachers and parents;

- Analysis of children's behavior in various activities.
Data on the study group children are shown in Table 1.

Table 1. Degrees of intellectual deficiency and primary disorders group of children

| Other primary disorders | Degrees of intellectual deficiency |
|-------------------------|-----------------------------------|
|                         | Light form of intellectual retardation (comparative group) | Moderate form of intellectual retardation | Severe form of intellectual retardation |
|                         | 10 people                  | 20 people                  | 5 people                  |
| **Vision impairment**   |                         |                             |                             |
| Visually impaired       | 0                         | 3                          | 5                          |
| **Hearing impairment**  |                         |                             |                             |
| Hearing loss of III - IV degree | 0                   | 0                          | 1                          |
| Hearing-impaired, I - II degree | 0                   | 1                          | 2                          |
| **Musculoskeletal disorders** |                  |                             |                             |
| Spastic diplegia        | 0                         | 2                          | 2                          |
| Double hemiplegia;      | 0                         | 0                          | 1                          |
| Hemiplegia;             | 0                         | 0                          | 1                          |
| Hyperkinetic form;      | 0                         | 1                          | 1                          |
| **ASD (Autistic Spectrum Disorder)** | 2                    | 10                         | 5                          |

At the preparatory stage of the study, in order to collect information about the features of their level of actual development and social behavior, the observation method and the method of expert evaluations were used. The method of expert evaluations was a survey of group teachers designed to assess the social behavior of the subjects.
During monitoring the children’s behavior in various activities and real life situations, situations that cause various reactions of the children were recorded and analyzed: extended motor activity; facial, gestural, vocal, verbal, emotional reactions and their intensity; interest in the actions and deeds of adults and children; and features of the behavior in various situations.

The main method of the ascertaining study was a psychological-and-pedagogical experiment, which consisted of several series.

In order to study the features of social behavior of children with SMDD, we identified the components of social behavior presented in Table 2.

Table 2. Components of social behavior

| Components of social behavior | Social component |
|-------------------------------|------------------|
| **Social component** | It includes basic practical knowledge about the world around. Compliance with the rules of moral behavior necessary for communication and cooperation, and for the implementation of social needs. Integration into the environment. Social contacts with people around |
| **Motivational Behavioral** | - Compliance with the rules of moral behavior necessary for communication and cooperation, and for the implementation of social needs.  
- Presence of motives for interaction with the respondent in the social environment  
- The adequacy of behavior in domestic, family and public situations is assessed. Regulatory and control function of the behavior in the process of building social interactions. |
| **Cognitive component** | The level of development of mental functions and social skills. Moral consciousness, knowledge of moral standards. The idea of oneself as a significant and equal person for others (self-determination). |
Each component is a group of social skills, abilities and behavioral patterns, norms, values, adopted by the child in his/her life experience, which allow him/her to be integrated into the society and make it possible to choose the right behavioral pattern depending on the social situation.

During selection of experimental tasks, we encountered a number of difficulties. It turned out that the arsenal of diagnostic techniques aimed at studying social behavior is very limited and is often not intended for younger schoolchildren with SMDD. Given this, on the basis of the diagnostic material studied, we modified a number of methods.

In order to determine the level of mental and social development of children to build further work on the formation of social behavior of younger schoolchildren, we selected the following methods differentiated by the components:

Cognitive component. Given the criteria of the socio-cognitive concept and levels of child’s development, we used the diagnostic method 1) Observation Map (Zinkevich-Evstigneeva, Nisnevich, 2000).

Table 3. The results of investigation of the level of mental functions and social-domestic skills development at the ascertaining stage of the experiment

| Levels       | EG  | CG  |
|--------------|-----|-----|
| Critically low | 64  | 0   |
| Low          | 16  | 30  |
| Medium       | 20  | 70  |

The method allowed us to assess the development of mental functions and social skills of children over time, and to generalize observations and quantitative and qualitative assessment of the teacher and the parent. As a result of diagnosis using this method, a psychological and pedagogical profile of the person at the time of examination is compiled.

The data obtained in the analysis show that when compiling the psychological and pedagogical profile of a person at the time of examination of the experimental and comparative groups, the indicators are clearly differentiated in most children. To simplify, we divided the students with similar results into groups, thus identifying the prevailing scores for each criterion into cognitive development levels, distributing them to
“medium”, “low” and “critically low”, respectively. In children with “Medium” (16% in the experimental group and 70% in the comparative group) and “Low” (64% in the experimental group and 30% in the comparative group) indicators, the long-term memory prevailed over the short-term one, the interests in and abilities for playing activity had different repertoire; the children played different games, and used substitutes; their response to real situations showed the assimilated experience (when new teachers came to the group, the students welcomed them by standing near their desks and saying ‘hello’); Mastery of elementary concepts from the outside world, amount of attention, speech development, visual perception (analysis, synthesis - visual integration), and hand-to-eye coordination - all of these indicators were high and medium.

Children with “critically low” level (20% in the EG and 0% in the CG) of cognitive development often interacted with their peers aggressively, sought to take away toys and pushed the others. Peers often did not accept children in their games and other activities, even if the teacher sought to arrange their interaction. All students demonstrated behavioral disorders, disinhibition, disorganization, and quick exhaustion. The study showed their low productivity, and poor performance. The children of this group mainly used ancillary speech means of communication, as well as simple gestures, screaming, vocalizations, and objective actions. The mastery of elementary concepts from the outside world is being formed; the children showed a small supply of ideas, reduced amount of attention; their speech development was at a low, mainly a non-verbal level; and visual perception (analysis, synthesis - visual integration), hand-to-eye coordination - all of these indicators were low.

Social and motivational-behavioral components. When identifying social skills in children, in our study we adapted and used the Sociogram method (Pedagogical analysis of social development of people with multiple disorders (form ASD-S/P). The method provides information on the rate of social development of a child, their communicative abilities, and identifies areas of the most active development of social skills.

Table 4. The results of investigation of the level of social skills development at the ascertaining stage of the experiment

| Levels         | EG  | CG  |
|----------------|-----|-----|
| Critically low | 60  | 0   |
| Low           | 40  | 70  |
| Medium        | 0   | 30  |
The analysis of the investigation of the level of social skills development showed that a low level of social skills development prevailed (70%) in children of the comparative group, and the most formed skills in children were the self-service skills: washing hands before eating, eating food using cutlery, proper use of napkins after eating, self-implementation of sanitary and hygienic procedures and mastering the skills of dressing and undressing. But the most lagging behind is the development of the emotional and communicative spheres, as well as speech functions. The children mainly pronounce monosyllables, are emotionally labile, do not show interest in leisure activities, and prefer to organize their activities on their own. They use speech as a means of communication only if it is necessary and with the assistance from an adult. In children of the experimental group, a critically low level of social skills development prevails (60%). Speech is not a leading means of communication in such children. They understand short phrases and instructions when these are accompanied with a direct display of the actions required from them. They do not perceive a longer phrase and do not react adequately. Many of them actively use gestures, thus compensating for the lack of speech (point with a finger at the desired item). This group of children is the most difficult in terms of speech development regardless of their age. Eye contact was absent in most cases of interaction.

The children experience difficulties in establishing contacts with other people, show aggression, may inadequately react to strangers, in public places, they are naughty, try to run away or hide, and shout loudly. Their social and household skills are not formed; they eat only with the help of a parent or a specialist. Dressing-undressing skills are partially formed at the differential level for each child. The low level of cooperation and interaction indicates a lack of skills in establishing interpersonal communication during joint work, lack of cooperation, eye contact, initiative in communication, and indifference to the assessment of one's and others' activities.

The formative and control stage of the experiment continues to the present. The planned completion of the study is 2021.

**Discussions**

The study of psychological and pedagogical literature allows us to ascertain a high interest in research in this area devoted to the problem of formation of social behavior in children with SMDD. At the moment, the following areas are poorly developed: the development of an approach to assessing the resources of social development of children with SMDD, the development of a special educational program to form a sustainable line of social behavior of children in the society and at home;
It is necessary to supplement the theoretical provisions on the content and methods of social development of younger schoolchildren with severe and multiple developmental disorders in conditions of socially integrated non-school activities.

The practical significance of this study is determined by the fact that it assumes:

- Development of scientific and methodological recommendations for teachers in the field of planning and implementation of the system of work on the formation of social behavior in younger schoolchildren with severe and multiple developmental disorders in non-school activities;

- Development of practical materials for parents on the formation of norms of socially acceptable behavior in younger schoolchildren with severe and multiple developmental disorders in non-school activities (in the family, in public places, in transport).

**Conclusion**

The analysis of the study suggests that the prevailing majority of children with SMDD show a low (52%) and critically low (25%) level of development of social behavior. When using observation, within the study of the criteria of cognitive and social components, lability and socially inappropriate behavior were noted, which, in turn, prevented the development of adequate social content necessary for the moral development of children; this underdevelopment related to the content of any activity and the degree of involvement of students in it (social, domestic, sanitary-hygienic, communicative).

After analyzing the data on observations of the development of the child, it can be established that the lower is the level of actual social development of a child with multiple disorders, the lower is the level of his/her social interaction and manifestations of social behavior, and vice versa, the higher is the level of development, the higher is the level of interaction and the adequacy of response to external stimuli. In this regard, we can assume that by developing lacking areas in a child, as well as by supporting and strengthening more developed social skills we can influence the processes of establishing relationships between the child and the society, while building a strong neural connection between actions repeated in familiar situations. Thus, the development of a program for the formation of norms of socially acceptable behavior in younger schoolchildren with severe and multiple developmental disorders during non-school activities (in the family, in public places, in transport) will over time lead to the formation of social behavior skills. The implementation of the program occurs both as a correction-pedagogical work with children with multiple disorders, and as training parents and teachers in qualitative interaction with the child in non-school activities.
Recommendations

Development of a special program includes mastering social behavior skills by children during simulation of various types of activities, teaching parents and teachers how to arrange these activities during non-school hours. The results of the study can be used in: 1) the development of scientific and methodological guidelines for teachers for planning and implementation of a work system on the formation of social behavior in younger schoolchildren with severe and multiple developmental disorders during non-school activities; 2) the preparation of practical materials for parents on the formation of socially acceptable behavior in younger schoolchildren with severe and multiple developmental disorders during non-school activities (in the family, in public places, in transport).

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