

# INCLUSION AND LEARNING: FACTORS AFFECTING STUDENTS WITH INTELLECTUAL DISABILITIES

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#### ABSTRACT

The purpose of the article is to identify the factors affecting the educational activity of students with intellectual disabilities, under the conditions of the principle of universal formation of learning, which will provide an opportunity to develop the practical orientation of the pedagogical and psychological support services provided to them.

Research conducted among 119 teachers and 32, students with intellectual disabilities (8-10year-old) from 25 general basic schools in Yerevan, Lori, Ararat, Tavush, Kotayk regions of the Republic of Armenia has allowed us to identify the factors affecting the learning process of students with intellectual disabilities, which cause many psycho-pedagogical problems in school.

The research was based on the issues identified during the additional special pedagogical support provided to these students, the complaints registered by the parents and the difficulties of the educators working with them, which are mainly related to the organization of joint learning and insufficient pedagogical conditions.

*Keywords:* inclusion, learning, intellectual disability, students with intellectual disabilities, affecting the educational activity, pedagogical and psychological support service.

#### **INTRODUCTION**

According to the World Health Organization, 10% of the total population in developed countries and 12% in developing countries are people with psychophysical developmental disabilities. Among them, 3.5% are children with language and speech disorders, and 2% are children with intellectual development disorders. They are the most vulnerable, as shown by numerous empirical studies on modern pedagogical processes (Chatenoud, Turcotte & Aldama 2020; Roberts, Tandy, Kim & Meyer, 2020; Harutyunyan, 2017; Saratikyan, 2009).



The psychophysical development of students from this group and the motivational and content features of educational activities are simply incompatible with the previous form of education. It has been found that the new approaches and principles introduced in modern educational processes are effective, which provide an opportunity to organize the learning process in a flexible and customized way.

Among them, the principles of universal design of learning (UDL), general environment design (GED) (in inclusive processes, in the form of the general learning environment design structure), studentcentered learning, creating an inclusive environment, and other principles stand out. As Rose and Meyer (2005) have noted, one of the important contributions of UDL and GED to inclusion is the educator's focus on the diversity of learners (Harutyunyan, et., al., 2020; Rose & Meyer, 2005).

Thus, the radical changes in the modern education field propose new models of learning, in which the individual characteristics, strengths and weaknesses of each student, the assessment of obstacles arising from the characteristics of development, and the material and technical base introduced to make the learning process flexible and comfortable, methodical and physical adaptations (Svajyan et al., 2022; Hays & Handler, 2020; Black, Krahmer & Allen, 2018; Petrosyan, Saratikyan, Hovhannisyan, 2012a).

However, it turns out that in Armenia, there are many obstacles related to the introduction of specially developed adaptations in the educational processes of students with intellectual disabilities, which make it difficult to effectively implement the pedagogical processes in the conditions of universal educational formation. Students of this composition are not able to independently set goals, realize them, plan their actions and perform self-analysis. There are many facts, according to which educators face serious difficulties during the education of students with intellectual disabilities, due to which many children simply fall out of the learning process, and teachers have many moral and psychological problems (Svajyan et al., 2021; Peter & Clement 2020; Petrosyan, Saratikyan, Hovhannisyan, 2012b).

Based on the above, it is possible to state that the studied problem is very newsworthy because it is directly related to the issue of improving public education processes. According to the research background, the analysis of the factors affecting the learning of students with intellectual disabilities will enable the development of a flexible and adapted methodical system in the course of further scientific research for the pedagogic-psychological support services provided to these students under the conditions of universal inclusion and the improvement of the quality of universal education.

# LITERATURE REVIEW

The analysis of the methodological bases of the researched issue allowed us to identify the main points of view and provisions that reveal the characteristics of the educational activity of students with intellectual disabilities, the approaches to the organization of joint learning, the theoretical foundations



and practical significance of the principle of universal formation of learning, as well as on the educational activity of students of this composition. reflecting factors.

According to them, it was found that the ideological values of modern education were based on Gardner, Bloom, Galperin, and Luria's well-known theories that emphasize the learner's multiple intelligence (Gardner, 2006; Luria, 1970), the hierarchical construction of pedagogical processes (Bloom's taxonomy) (Bloom, 1956), the staged development of intelligence (Reana, 2003; Talizina, 1984; 2006; Galperin, 1976). Luria's theories of experimental (project) learning which is widely used in the modern education system (Kornetova, 2009; Luria, 1970). Rose and Mayer's (2005) approach to the universal formation of learning is based on the formation of the ability to remember, understand, apply, analyze and evaluate the learning material (hierarchical structure of the learning process), the promotion of motivation for learning activities, the development of action plans, execution, presentation, etc. are brought to the fore (the theory of staged development of intelligence), as well as the formation of the ability to find solutions by performing independent experiments.

All this, as the scientific analyses indicate, is anchored in the mechanism of activation of activity of three functional blocks of Luria's brain, namely activation of cognitive, strategic and emotional networks.

According to Rose's study (2005), the learner should understand why to learn (promoting learning needs), what to learn (knowledge, abilities, skills) and how to learn (flexible, adaptable, multi-use tools, pedagogical ethics). This approach stimulates brain activity and activates the student as an individual in these processes (Rose & Mayer, 2005).

The literature review has shown that this approach is quite successful in developed Western countries, but in developing countries, there are still many obstacles that objectively cause difficulties in educational processes, especially when it comes to students with intellectual disabilities (Peter & Clement, 2020; Hays & Handler, K., 2020).

The analysis of scientific-methodical and scientific-pedagogical literature has shown that according to the requirements of modern education, students with intellectual disabilities are included in general education without discrimination, but the pedagogical-psychological support provided to them has acquired decisive importance for accounting for the characteristics of their educational activities and factors affecting their learning.

In the conditions of inclusive education such phenomena as low self-esteem, avoidance of educational activities, maladjustment at school, etc. are often recorded in children with mental developmental disorders, which are caused by insufficient pedagogical conditions. In inclusive processes, they are quite sharply expressed and are decisive from the point of view of these children's

social adaptation and acquisition of educational abilities. This is due to the mental and physical, as well as educational activity, behavioral, and emotional features of the students of this group.

The low educational requirements of students with intellectual disabilities, the psychoneurological processes of understanding the educational material, the volume, the pace, and the sustainable strengthening of the acquired knowledge, abilities and skills, as well as the inability to voluntarily regulate behavior, create a demand so that in the processes of universal formation of learning "accurately" calculate their developmental and educational requirements and their characteristics (Harutyunyan et. al, 2020; Lizunova & Anatolyevna, 2020; Harutyunyan, et. al., 2019; Petrosyan, Saratikyan, Hovhannisyan, 2012a).

This requirement puts teachers, parents, and even special educators in front of serious difficulties in modern pedagogical processes. Experimental studies prove that many methodological resources are needed for this, to organize the learning process based on the individual characteristics of each learner. Pedagogical and psychological support services help to solve these problems in real educational processes, without which joint learning processes cannot take place (Wahyunika, Miftachurohmah<sup>-</sup>Insyra, Qisissin, Aisah, Jatmiko 2020; Whitver, 2020; Tobin, 2019).

Based on the above, the analysis of the factors affecting the learning of students with intellectual disabilities was based on the analysis of the practical setting of the pedagogical and psychological support service provided to them, through surveys, interviews, free conversations and observations among teachers, parents and students.

# METHODOLOGY

Considering the study problem as a priority for the organization of joint learning of students with intellectual disabilities with their non-disabled peers, it was tried to solve the factors affecting their educational activities, which are especially acute in the conditions of universal inclusion.

The research was conducted in 2022-2024 in the Republic of Armenia. A total of 119 teachers of 25 primary schools in Yerevan, Lori, Ararat, Tavush, and Kotayk regions of the Republic of Armenia and 32 students with intellectual disabilities aged 8-10 years and their parents took part in the research.

The research data have been collected using the following methods:

- Survey administration: standardized questionnaires were used to gather quantitative data from participants.
- Semi-structured interviews: in-depth conversations explored participants' experiences and perspectives in detail.
- Open-ended discussions: unstructured conversations facilitated the collection of rich qualitative data.



- Direct observations: researchers observed participants in their natural environment (e.g., classrooms, support service sessions) to gain insights into their behavior and interactions.
- Case study analysis: existing case files documented from support services provided to students with intellectual disabilities were analyzed to identify patterns and trends.

Thus, a quantitative research, in-depth interview questionnaire was developed and thematic conversations were held ("How does your child adapt to the classroom process?", and "How do they help the child at school in learning the learning material?", "What is the child complaining about?", "What do the pedagogic-psychological support services give you to support the child at home?")

By the established objective, partial research inquiries were delineated as follows:

- to discover how pedagogues, evaluate the socio-psychological and pedagogical conditions of providing pedagogical-psychological support services for students with intellectual disabilities;
- find out how educators evaluate the availability of the material and technical base required for the provision of pedagogical-psychological support services to students with intellectual disabilities;
- to what extent are they provided with appropriate tools for organizing the learning of students with intellectual disabilities?
- which factors and obstacles affecting the effectiveness of the learning processes of students with intellectual development disorders are distinguished?

# RESULT

Based on the goal of analyzing the factors affecting the educational activity of students with intellectual disabilities, the following key point actions were identified:

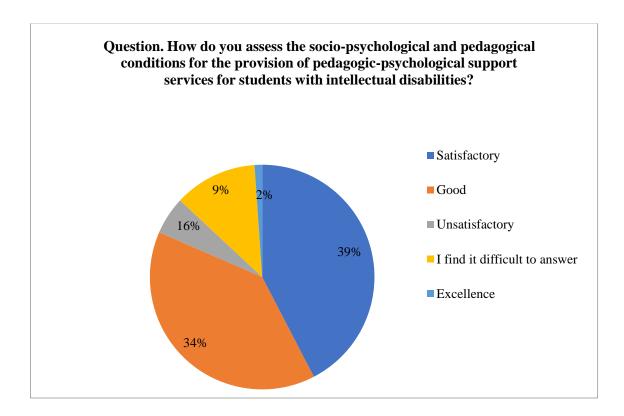
- 1. to study the practical situation of students with intellectual disabilities through surveys and interviews with teachers;
- 2. to identify the obstacles and complaints recorded during the educational activity of students with intellectual disabilities;
- to make comparative analyses between surveys conducted with teachers and conversations conducted with parents and children, interviews, and cooperative difficulties recorded during practical classes;
- 4. to make conclusions to enable outlining and defining the vision of a practical direction for improving the learning processes of students with intellectual disabilities.



And so, to the question: "How do you evaluate the socio-psychological and educational conditions for the provision of pedagogical-psychological support services for students with intellectual disabilities?" 40 of 119 teachers (34%) answered "Good", 47 (39 %) rated it as "Satisfactory", 11 (9%) found it difficult to rate it, 19 (16%) rated it as "Unsatisfactory" and only 2 (2%) rated it as Excellent" (Figure 1).

# Figure. 1

Indicators of assessment of socio-psychological and pedagogical conditions of provision of pedagogic-psychological support services to students with intellectual disabilities.



As a result of the data analyzed from in-depth interviews conducted with educators for the same question "What socio-psychological factors should be taken into account in the pedagogical-psychological processes of students with mental developmental disorders?", 75 out of 119 (63%) teachers' responses recorded that could not interpret them or gave general answers, while only 16% assessed the socio-psychological and pedagogical conditions for the provision of pedagogical-psychological support services to students with intellectual disabilities as "Insufficient".

At the same time, during the training conducted with 38 students with intellectual disabilities, it became clear from the children's behavioral manifestations and recorded "Dissatisfactions" that almost 20 of them (53%) have many conflicts in their interpersonal relationships with teachers. Almost 28 (74%) have a very negative attitude towards stationery and some pedagogical instructions (towards the

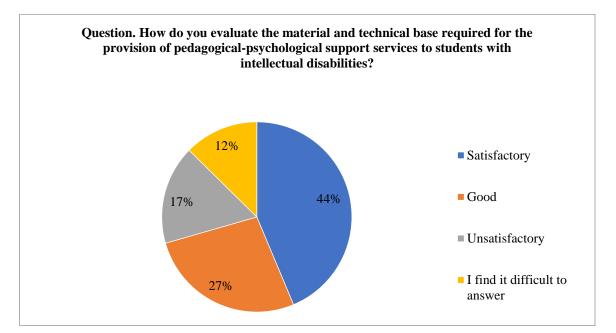


instruction of "Red pen", "Pointing stick" or "Follow the text with your finger"). Most of them said that no one wants to sit next to them in the class, "They don't play with them", and "Teacher's assistants don't like them because they help their other friends and not them".

Related to the question to obtain information on the availability of relevant educational materials in the junior school: *"How do you evaluate the material and technical base required for the provision of pedagogic-psychological support services to students with intellectual disabilities?"* the following picture had been received (Figure 2). The majority of respondents are more or less satisfied with the available resource and evaluate it as "good" or "Satisfactory".

# Figure 2.

Evaluation indicators of the material and technical base required for the provision of pedagogicalpsychological support services to students with intellectual disabilities.

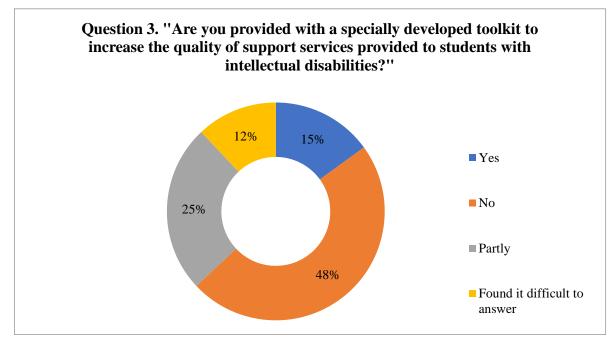


At the same time, during free conversations and interviews, the question of, for example, what supporting materials are used during the "Mother Language" class, what supporting didactic materials do they have in the classrooms for letter learning, the texts for the educational purposes of children with mental development disorders. to adapt to needs, they mainly mentioned posters and pictures intended for normally developing children, which either remained from the former Soviet period or were self-made and developed during their own experience, which did not take into account the features of the sensory sphere of students with intellectual development disorders. Only 37 (31%) of the teachers interviewed mentioned special libraries, voice guidance, some features of working on the test, and other approaches to adapt the basic learning material with QR codes to the educational needs of these learners.



Thus, the researches on the practical setting of the universal learning process prove that the methodological and material-technical base, which is an important component of it for students with intellectual disabilities, such as accessible teaching manuals, textbooks, notebooks, card libraries, and sticky, bold, clear font and large font libraries with font sizes (14-16), as well as special writing equipment, "Talking alphabets", for the consumption of alternative communication are missing.

This is also evidenced by the answers to the question "Are you provided with a specially developed toolkit to increase the quality of support services provided to students with intellectual disabilities?" which is shown in Figure 3.

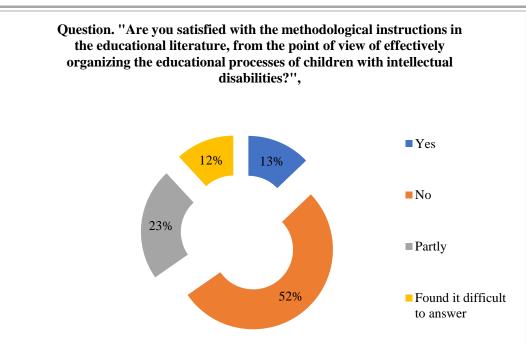


# Figure 3.

The registered indicators regarding the availability of the toolkit to improve the quality of support services provided to students with intellectual disabilities.

The above-mentioned facts are also reflected in the answers given to the question, "Are you satisfied with the methodological instructions in the educational literature, from the point of view of effectively organizing the educational processes of children with intellectual disabilities?" indicated in Figure 4.





#### Figure 4.

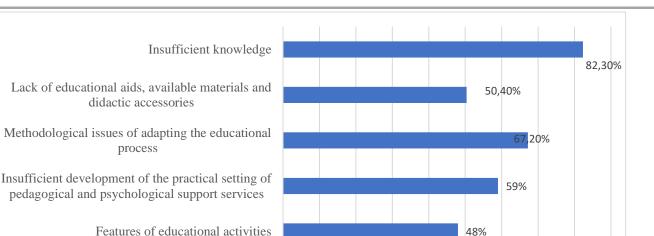
# The recorded indicators regarding the effectiveness of the methodological instructions provided in the direction of increasing the quality of support services provided to students with intellectual disabilities.

From the answers given to the question "What methodological tools do you use" during the indepth interview and free conversations, it can be seen that some teaching aids are provided to teachers within the framework of methodological support developed by the MCC, but specifically developed specifically for children with intellectual disabilities. instructions are almost absent and they are not enough to facilitate the learning of children in this group (84%)

Taking into account the significance of the impact of factors affecting the organization of pedagogical processes, we have also tried to find out, especially according to the teachers, what they are through surveys.

"In your opinion, what are the factors and obstacles that have the most negative impact on the learning of students with mental retardation?" 57 out of 119 teachers (48%) noted the peculiarities of their educational activities, 70 (59%) noted the insufficient development of the practical setting of pedagogical and psychological support services, and 80 (67%) pointed out the methodological issues of adapting the educational process. As for the lack of teaching aids, available materials and didactic accessories, 60 (50%) mentioned them, and 98 (82%) mentioned their insufficient knowledge in this field (Figure 5).





# Figure 5.

# Factors and obstacles affecting the effectiveness of educational activities of students with intellectual disabilities.

The fact that the characteristics of the learning activities of students with intellectual disabilities are decisive for modern educational processes is also evidenced by parents. Almost 66% of the 38 parents who participated in the interview "How do they help your child master the learning material" answered that they *"don't understand"* the characteristics of the child's development at school, *"they don't know how to deal with them in learning"*. Many children, according to their parents, only copy or copy the letters, and recopy them, while most of them write and read as a result of additional special pedagogical training.

During one of the conversations, the parent participating in the research said: "We only sign some papers at school, but we don't have results...". By the way, research shows that many of them simply refuse the pedagogic-psychological services provided at school, considering them ineffective. Another respondent says: "The child refuses to go to school. leaves the classroom because he is idle and bored". These and many similar facts indicate that there are serious problems in the actual learning process of this group of students. Our long-term experience also proves that the knowledge, abilities, and skills given in the course of special pedagogical additional classes are generally not continued at school and are not combined with the taught content. He thought that the goals of special pedagogical support and educational processes proceed independently of each other.

By the way, the fact that educators do not have sufficient knowledge and experience to work with students with intellectual disabilities was also proven by surveys, where 82% of teachers confirmed



that one of the most serious factors affecting the educational performance of these students is their insufficient knowledge.

During the in-depth interviews, 45 of 119 teachers (38%) responded to the question, "How do the difficulties arising in the work with students with intellectual disabilities affect their pedagogical activities" that in most cases they experience feelings of helplessness, disappointment, and hopelessness. feeling, 56 (47%) try not to notice the difficulties and continue to work, and the descriptions of 55 (46%) reflect the phenomenon of professional burnout. 75 (63%) of the educators stated that "to overcome these situations" they try to overcome the lack of knowledge and gain new experience through self-education and self-development.

The conducted research allowed the making of several conclusions, which are presented below in the section.

# **DISCUSSION AND CONCLUSION**

The conducted quantitative and qualitative research allowed us to conclude that the sociopsychological and pedagogical conditions for the provision of pedagogic-psychological support services for students with intellectual disabilities are insufficiently developed, the material and technical base of educational process psychological support needs to be satisfied, and the methodology of the toolkit provided to educators needs to be rethought and reworked (Peter & Clement, 2020; Hays & Handler, K., 2020).

It has been revealed that the factors affecting the learning process of students with mental development disorders cause several psycho-pedagogical problems, which negatively affect the motivations of students' educational activity, and the effectiveness of learning. It was found that among the factors affecting the effectiveness of pedagogical-psychological support for students with intellectual disabilities, most of the pedagogues prioritized the methodological issues of adapting the educational process (67%), most of them found that the practical setting of pedagogical-psychological support services is insufficiently developed (59%).

It was found that 50% of the respondents considered the lack of available educational materials and didactic accessories as an obstacle. 48% of educators considered that these children's developmental characteristics, maladaptive behavior, and learning activities make it very difficult for them to learn together and even in the conditions of the universal formation of learning require specially developed approaches. It should be noted that the highest indicator related to the factors hindering the educational process of students with intellectual disabilities is the insufficient knowledge of general education school teachers to work with them, which was mentioned by 82% of educators.



It follows from what has been said that in the conditions of universal inclusion and education reforms, there are many factors affecting the learning of students with intellectual disabilities, which

hinder the formation and establishment of educational activities for these children. In addition, many psycho-pedagogical problems arise, which have a particularly negative impact on the motivational sphere of this form of activity, positive classroom environment, and, in general, school adaptation Tobin, 2019).

Based on the above, we believe that the pedagogical and psychological support service provided to these children still has ideological and content deficiencies, which are typical of developing countries, and that they require urgent solutions to fully include children with mental development disorders in the modern education system.

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