

MODELS OF INTERVENTION IN THE RECOVERY OF CHILDREN WITH MENTAL RETARDATION AND AUTISM SPECTRUM DISORDERS. ALTERNATIVE THERAPIES

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Abstract: Learning activities, targeted therapy is the main sear, support and guidance to develop compensation. Develop compensatory mechanisms in children with mental retardation can be supported effectively when learning activities is based on a methodological approach adapted to the particularities of development in children concerned. When we talk about specific ratio of psychic development and learning disabled, use the following phrases: developmental disorders, developmental delays, impaired învățareraportul specific of psychic development and learning disabled, use the following phrases: developmental disorders, delays development, learning disorders. Structuring a behavior as close to normal as possible to encompass the three fields of activity - cognitive, language, socialization. Language skills will be obtained more easily in a conversational interaction, in a certain context. The child will be taught to plan time periods for structured social interactions. The active role of parents and teachers is essential. Language learning does not follow competence but social utility. For those who do not speak, the emphasis is on understanding, not on the ability to express. Sometimes sign communication prepares the ground for later verbal communication. The content of the article is a finding of the exploratory study: "Analysis of teachers' perceptions of curricular policies and strategies in pre-primary and primary special education" was conducted between December 2017 and March 2018, comprising a lot of 57 respondents, teachers involved in the process of education in the classroom of children diagnosed with ASD and mental retardation. Finally, the qualitative results obtained from the application of the questionnaire are presented and some recommendations are proposed.

Keywords: language; socialization; visual images; special education; autism spectrum disorders; mental retardation; teacher perceptions.

1. Introduction.

Over time, attitudes and conceptions of people with disabilities have changed and become much more nuanced. From the concepts related to eugenics specific to Sparta, social opinion has evolved into increasingly broad and deep concerns about the possibilities of treatment, recovery and rehabilitation of people with different types of disabilities.

In the case of the mentally handicapped child, many of the established specialists in the field appreciate the value of the fundamental laws, which aim at the psychic organization and express the nature of the organization and the dynamics of the personality. The law of dialectical interaction between causes, external factors and internal conditions, which has a dynamic character and shows that the process of mental development is determined by the

influences of the external environment and the way of receiving and processing stimuli, depends on the person's internal factors, previous experiences. , the interaction between internal and external stimuli (Păunescu, C., 1994).The law of staging, which refers to the gradual nature of the formation and development of all psychic processes, the stages of formation of which follow one another in a hierarchically stratified order.

For an accurate understanding of the concept of mental deficiency, we must note the distinctions between the concept of intellect (the totality of cognitive, primary and higher processes) and intelligence (general aptitude of the human psychic system), whose level is measurable by the IQ. is characterized by a general impairment of intellectual psychic abilities, visible and measurable by the IQ.(Păunescu, C., 1981). The DSM V Psychiatric Diagnostic Manual describes, for example, intellectual impairment as a below-average intellectual functioning (IQ. 70), with onset before the age of 18 and concomitant with deficits and impairments of adaptive function. (Manual of Diagnosis and Statistics of Mental Disorders - DSM V, 2016).

Autism is a distinct syndrome, characterized by a specific cognitive, social and behavioral pattern, more common in boys. In its classic form, described by Kanner, autism is included, through the current disease classification system, accepted by the WHO, ICD-10, in the group of pervasive developmental psychoses. S. Freud, in 1911, stated that autism is a clear example of a psychic system broken by the stimuli of the outside world and able to satisfy in an autistic manner even its nutritional needs. According to ICD-10 (World Health Organization, 1992) and DSM-IV (American Psychiatric Association, 2000), three disrupted areas of activity are essential for the diagnosis of autism: impaired verbal communication and interpersonal relationships, restrictive, repetitive behavior, stereotype, abnormalities that begin before the age of 36 months.

Language is one of the most important mental activities that differentiates preschoolers and children from primary school, right from the beginning of school. The differences are distinguished at the level of language use in different communication contexts, but especially from the perspective of the level of expression, phonetics, grammatical structure (Hațegan, Bodea, 2015)

Verbal communication in the mentally handicapped child is distorted. He has no equal opportunity to initiate and perpetuate a discourse. The mentally deficient child does not have the possibility to regulate the parents' behavior through various actions, they ask few questions, they have reduced possibilities to express their attitudes and feelings (Popovici, D-V, 2000).

2. Methodology

The research "Analysis of teachers' perceptions on curricular policies and strategies in special preschool and primary education - exploratory study" took place between December 2017 and March 2018, included a group of 57 respondents, teachers involved in the children's education process diagnosed with ASD and mental retardation.

The questionnaires were applied online as well as in the C.S. E. I.Nr. 1 Bacău, a school that offers educational-therapeutic services to children with mental retardation and ASD.

The structure of the questionnaire included a set of questions organized on the following dimensions: information, educational services, structuring the learning environment, assessments on the degree of adaptation of the language development program and communication to the specific development of the child with mental retardation and ASD, therapeutic interventions for mental retardation and non-specific services ASD, family collaboration, demographics.

Purpose: Analysis of teachers' perceptions on curricular policies and strategies in special preschool, primary and secondary education that educate children with autism in the city of Bacău, respectively in the School Center for Inclusive Education No. 1 Bacău.

3. Research objectives

Ob.1: (It.1, It.2, It.3), Demographic data analysis.

Ob.2: (It.4), Assessment of the degree to which teachers consider that the current curriculum for language and communication development is adapted to the preschooler / student with mental retardation and ASD.

Ob.3: (It.5,6,7), Identification of an accessible communication procedure in order to improve the communication of preschoolers / students with ASD, by diversifying and systematizing the methods and means used in working with the autistic child in the classroom and at the therapeutic office.

Ob.4: (It. 8,9), Highlighting the perception of teachers on how to structure the space for preschoolers and students with mental retardation and ASD.

Ob.5: It.10, It.11, Assessment of teachers' perception on the period / frequency of re-evaluation / updating of the objectives proposed for the educational approach in the case of preschoolers / students with mental retardation and ASD.

Ob.6: It. 12, Analysis of teachers' proposals for improving the educational-therapeutic process in school in order to adapt teaching aids and working methods for children with mental retardation and ASD.

Ob.7: It. (13,14), Assessment of the degree to which teachers know and apply appropriate teaching strategies to the student with mental retardation and ASD.

Ob.8: It. (15, 16), Assessment of the attitude of openness and the degree of involvement of the child with mental retardation and ASD in teaching activities.

Group of subjects: 57 preschool teachers and primary school teachers- C.S.E.I. Nr. 1 Bacău, primary school teachers. Online questionnaires were also applied, which also included teachers in mainstream schools who enrolled students with mental retardation and ASD in the classroom.

4. Methods and tools

Survey based on a special questionnaire developed in this paper.

Given the fact that in our school there are students with ASD associated with mental retardation, for several years we considered that the opinion of teachers with experience and seniority in inclusive education - special will really contribute to capitalizing on our research, so we initially did, a group of 8-10 participating teachers. Teachers from children's classes were asked to take part in a discussion that was structured on a set of questions - "questionnaire".

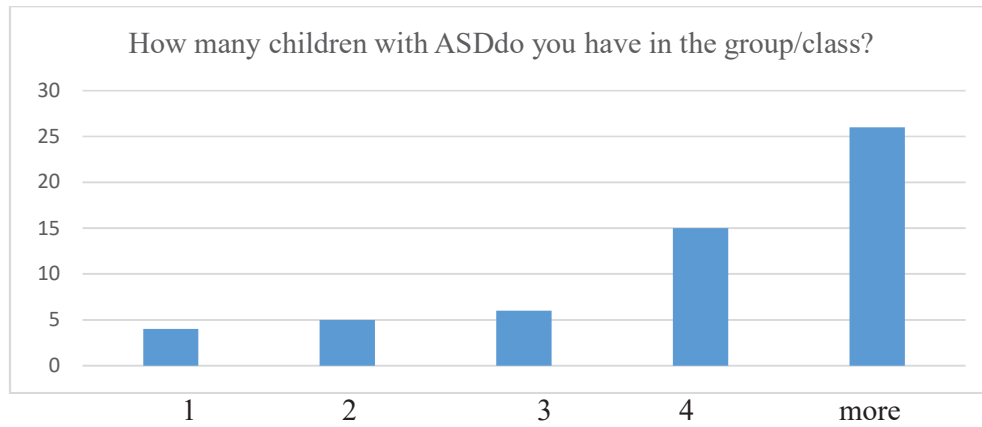
We used this technique in order to have complete information about the attitudes and opinions of the participants regarding the topics discussed in the group discussions.

Tool: Questionnaire for teachers who enrolled children with autism in the group / class.

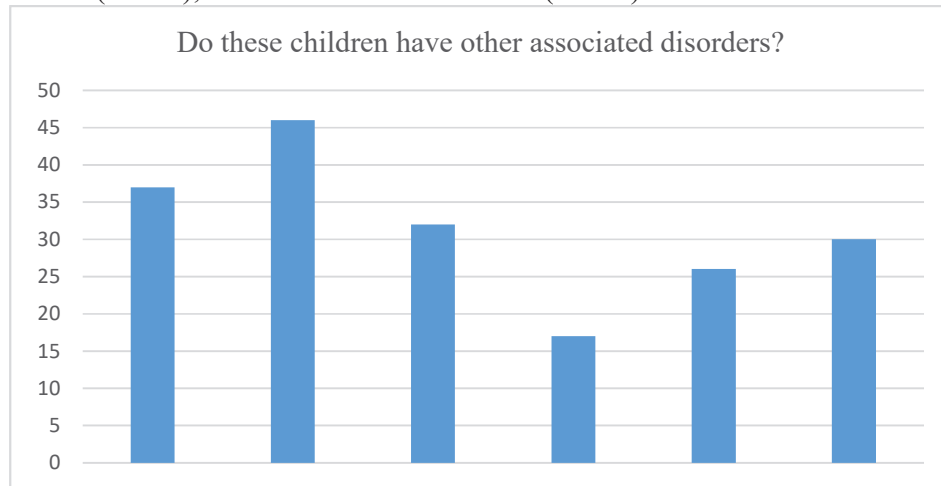
We used this questionnaire in order to form an image about the attitude of teachers who have students with ASD in the classroom, regarding the approach of the teaching-learning process to the preschooler / student with mental retardation and ASD. The questionnaire was also applied online.

5. Interpretation of results

Quantitative analysis of teachers' responses following the application of the questionnaire



To the question “How many children with ASD do you have in the group / class?”, The answers were 46.4% with more than 4 children with ASD in the class, as follows: 1 child-4 answers (7.1%); 2 children - 5 answers (10.7%); 3 children - 6 answers (26.8%); 4 children - 16 answers (26.8%); more children - 26 answers (46.4%).



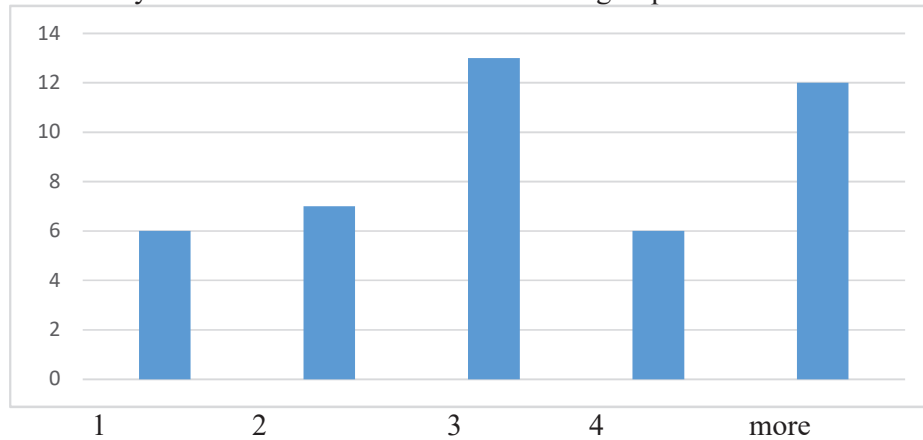
ADHD Mental retardation Speech / language disorders Sensory disorders Adaptive behaviors / aggression Motor stereotypes

To the question: "Do these children have other associated disorders?" (item with multiple choices) it can be seen that there are largely associations of autism with other types of disorders, as follows:

- Mental retardation in proportion of (82.1%) - 47 answers,
- ADHD in proportion (66.1%) - 32 responses,
- Speech / language disorders in proportion (57.1%) - 32 answers,
- Motor stereotypes in proportion of (53.6%) - 30 answers,
- Adaptive behaviors / aggression (46.4%) - 26 responses,
- Sensory disorders (30.4%) - 14 responses.

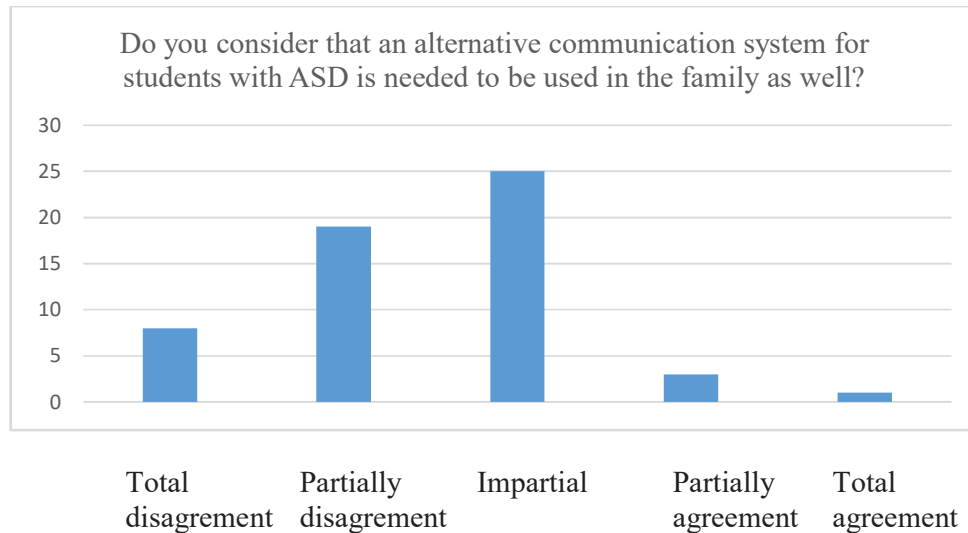
How many of the children with ASD in the group / class are nonverbal?

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To the question: "How many of the children with ASD in the group / class are nonverbal?" the following answers were obtained:

- 1 child in proportion: 10.9% - 6 answers,
- 2 children in proportion of: 12.7% - 7 answers,
- 3 children in proportion of: 23.6% - 13 answers,
- 4 children in proportion of: 10.9% - 6 answers,
- more children - in proportion: 21.8% - 12 answers.



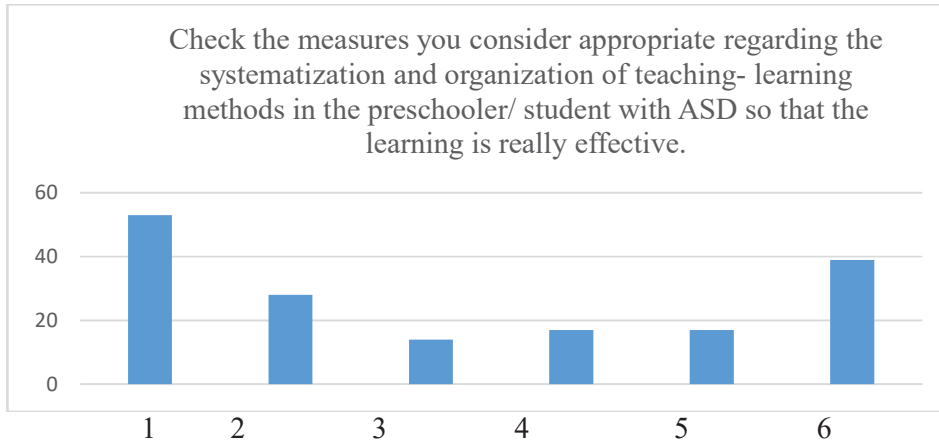
To the question: "Do you consider that an alternative communication system for students with ASD is needed to be used in the family as well?" The following answers were obtained:

- Total disagreement - in proportion of 1.8% - 1 answer,
- Partially disagreement - in the proportion of 0% - 0 answers,
- Impartial - 14.3% - 8 answers,
- Partially agreement - 53.6% - 30 answers,
- Total agreement - in the proportion of 30.4% - 17 answers.

At the item:

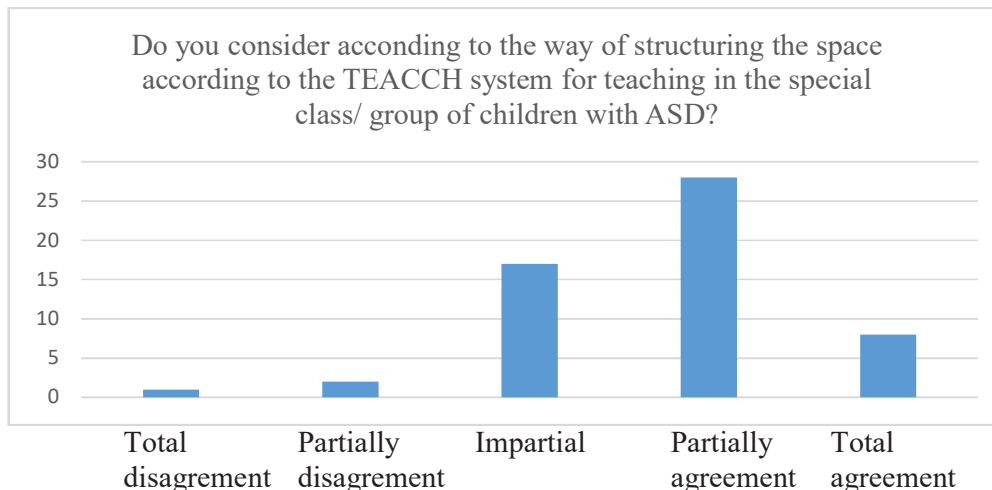
"Check yes or no and rank from 1 to 6 according to your experience which communication system you think is more suitable to be used by preschoolers / students with ASD" the following answers were obtained:

In the item: "Check the measures you consider appropriate regarding the systematization and organization of teaching-learning methods in the preschooler / student with ASD so that the learning is really effective", the following answers were obtained:



- 1 The work system should be individualized according to the needs of the child - 53 of the respondents considered this measure important, in proportion of 94%;
- 2 To indicate to the preschooler / student what activities they have to do - 50%, 28 of the respondents considered this support measure important;
- 3 To indicate to the preschooler / student when all the activities are finished - 25% of the respondents considered this important - 14 respondents;
- 4 To indicate to the preschooler / student what he / she will do after completing the activities / or what he / she will receive (reward) - 30.4% - 17 respondents;
- 5 To start with activities in which preschoolers / students have successful experiences - 30.4% ticked this measure - 17 respondents;
- 6 Guidance given to children in carrying out tasks, exhortations and systematic rewards - 69.6% of respondents considered this support measure important for facilitating learning, totaling 39

respondents.

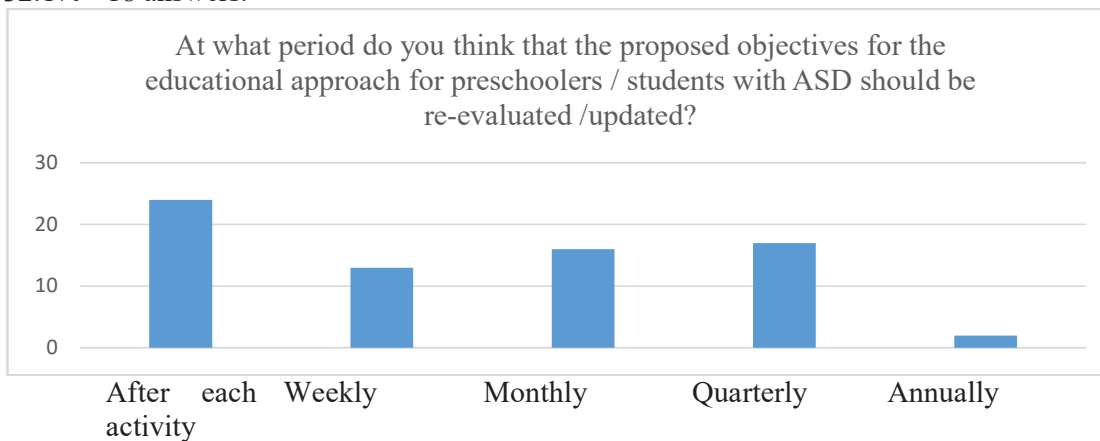


To the question: “Do you consider according to the way of structuring the space according to the TEACCH system for teaching in the special class / group of children with ASD? ”The following answers were obtained:

- Total disagreement - in proportion of 1.8% - 1 answer;
- Partially disagreement - in proportion of 3.6% - 2 answers;
- Impartial - 30.4% - 17 answers;
- Partially agreement - in proportion of 50% - 28 answers;
- Total agreement- in the proportion of 14.3% - 8 answers.

In the item: “Check, as far as you consider them appropriate, one or more of the following reasons for the implementation of structured learning in the classroom, numbering from 1 to 7”, the following answers were obtained:

- Helps the child with autism to better understand the environment - in proportion of 85.7% - 48 answers;
- Helps the child with autism to be calm - in proportion of 25% - 14 answers;
- Helps the child with autism to better learn the visual indications (instructions) - in proportion of 58.9% - 33 answers;
- Helps people with autism to focus on relevant information - 33.9% - 19 responses;
- The structure is the tool that will help the person with autism to be independent - in proportion of 30.4% - 17 answers;
- Structure is a form of behavior management - 41.1% - 23 responses;
- Helps the student to generalize the behavior through visual systems - in a proportion of 32.1% - 18 answers.



To the question: “At what period do you think that the proposed objectives for the educational approach for preschoolers / students with ASD should be re-evaluated / updated? ”The following answers were obtained:

- After each activity - in proportion of 42.9% - 24 answers;
- Weekly - in proportion of 23.2% - 13 answers;
- Monthly - in proportion of 28.6% - 16 answers;
- Quarterly - in proportion of 30.4% - 17 answers;
- Annually - in proportion of 3.6% - 2 answers.

To the question: “What proposals do you have for improving the educational-therapeutic process in school in order to adapt the teaching aids and working methods for children with ASD and mental retardation? ? Check the answers you consider appropriate and number them

from 1 to 6 "(multiple choice item), teachers considered important some measures to improve the therapeutic educational process in the school in the following proportions:

- Adapted teaching materials - 94.6% - 53 answers;
- Selection of contents according to the assimilation possibilities of children with ASD - in proportion of 64.3% - 36 answers;
- Informing parents and their active involvement in continuing the educational-recovery process by generalizing in other environments the behaviors learned by the child - in proportion of 57.1% - 32 responses.
- Diversification of compensatory therapies offered to children with ASD in school - in proportion of 51.8% - 29 responses;
- Teacher training - in proportion of 37.5% - 21 answers;
- Auxiliaries / guides - the existence in school of an educational resource center - in proportion of 33.9% - 19 answers;

The component related to the management of disruptive behaviors of children in the classroom:

To the question: "Do you consider that you have adequate and effective strategies to react to the behavioral disorders of the child with ASD when they manifest in class?" The following answers were obtained:

- Almost not at all - in proportion of 6% - 4 answers;
- To some extent - 57% - 32 answers;
- Teachers know how to react to the child's behavioral disorders when they occur in the classroom "to a large extent" - in proportion of 24% - 14- answers,
- To a very large extent - in proportion of 3.6% - 2 answers.

The attitude of openness and the possibility to include the child with ASD in the teaching activities:

To the question: "Does the number of children in the class allow you to take into account the special needs of each child?" The following answers were obtained:

- Not at all - in proportion of 0%;
- Almost not at all - in proportion of 16.1%;
- To some extent - 60.7% - 34 answers;
- To a large extent - in proportion of 19.6% - 11 answers;
- To a very large extent - in proportion of 3.6% - 2 answers.

Regarding the component regarding the number of children with ASD enrolled in the class, it reflects the perception of teachers on the possibility of managing the special needs of each child during the educational act and highlights the fact that 60.7%, ie 34 of the responding teachers consider that they manage to some extent to take into account the special needs of each child, while 19.6%, meaning 11 respondents, appreciate that they manage "to a large extent".

The conclusions of the analysis

The analysis of demographic data, targeted by **objective 1**, provides us with data on the number of students with ASD in the classroom, which is 4 in 26.8% and more than 4 in 46.4% of cases.

Regarding disorders associated with autism - mental retardation is present in over 80% of cases, also ADHD, language disorders are common, in proportion of 57.1%.

Regarding **objective 2**, (It.4), Assessment of the degree to which teachers consider that the current language and communication development program is adapted to the preschooler / student with ASD, the responding teachers considered that it is not adapted at all to the

preschooler / student with TSA in the proportion of 14.3%, almost not in the proportion of 33.9%, and, to some extent adapted, in the proportion of 44.6%.

It follows that, in the opinion of the respondents, the current language and communication development program is not adapted to the preschooler / student with ASD.

Objective 3, detailed through Items 5,6,7 of the questionnaire: identification of an accessible communication procedure in order to improve the communication of preschoolers / students with ASD, by diversifying and systematizing the methods and means used in working with the autistic child in the classroom and in the therapeutic office . The teachers involved in this study considered that an alternative communication system is needed for students with ASD to be used in the family as follows: to some extent: 14.3%, to a large extent 53.6 %, to a very large extent 30.4%.

Therefore, it is necessary to implement a communication system for children with ASD. This is all the more so as the vast majority of them are nonverbal. Teachers considered appropriate and ranked alternative communication systems and procedures in working with autistic children, as follows: PECS (Communication System by Changing Icons / Images), 48 responses, use of visual cues 40 responses, computer communication - 36 answers, verbal 37 answers, through mimetic-gestural language- 21 answers.

Regarding **Objective 4**, highlighted by items 8 and 9: highlighting the perception of teachers on how to structure the space for preschoolers and students with ASD, the teachers participating in the study considered that the way of structuring the space according to TEACCH does not influence at all the student with ASD in a percentage of 3.6%; 30.4% ticked the answer “to some extent”, 50% “to a large extent” and 14.3% “to a very large extent”.

In conclusion, we can say that the way the space is structured according to TEACCH is considered beneficial for the child with ASD by most of the respondents. The reasons for implementing structured learning in the classroom, in order of their importance and the extent to which they were considered appropriate are: “helps the child with autism to better understand the environment” in proportion of 85.7%, “helps the child with autism to learn more good visual indications (instructions) in proportion of 58.9%, “structure is a form of behavior management” in proportion of 41.1%, “helps the student to generalize the behavior through visual systems” in proportion of 32.1% .

To the question: "Do you consider according to the way the space is structured according to the TEACCH system for teaching in the special class / group of children with ASD?" out of the total number of answers, 50% of the teachers considered that the space structured according to the TEACCH system helps students with ASD "to a great extent", and 14.3% "to a very large extent".

However, in addition to this structured framework, in the opinion of the teachers responding to the questionnaire, other approaches can be combined according to the individual needs of the students.

Physical structure can help students with ASD progress toward better participation in classroom activities. For example, defining areas with colored strips can be useful in a wide variety of contexts. This demarcation delimits the space, which is extremely useful for students with ASD, helping them to focus better on daily tasks and knowledge taught in the classroom. In this way, children with ASD can better understand what is expected of them in certain areas.

In conclusion, the effective physical structure of the class can promote goals related to personal, social and emotional development. Physical structure can help students share space and work with others, develop organizational and study skills, personal and social skills, and behavioral self-management.

Another way of structured teaching is visual programming. These daily programs provide visual information that informs students with ASD about what will happen during the day and in what order. Visual plans allow students to anticipate and understand what will happen to them and then a series of programs can be developed. They can be developed to be meaningful to preschoolers / students with ASD at any level of functioning. Daily scheduling helps children with ASD access the curriculum in several ways.

The use of visual programs can improve curriculum objectives by reducing confusion and increasing flexibility, thus encouraging access to a wider range of activities appropriate to their level of development.

In the item: "Check the measures you consider appropriate for the systematization and organization of teaching methods - learning in preschool / student with ASD for learning to be truly effective", teachers considered important most of the measures stated, namely: the structure helps the child to better understand the environment - in proportion of 85.7%, the work system should be individualized according to the needs of the child (94.6%), to indicate to the preschooler / student what activities they should do (50%), to start with activities in which the preschoolers / students have successful experiences. in proportion of 30.4%, the instructions given to the children to accomplish the tasks, the exhortations and the systematic rewards - 69.6%.

Visual information is also important because it is the best way to help students with ASD learn. It is clear that this information must be individualized; each student will have different requirements. This means that it is impossible to provide structured lesson plans that can be copied and applied to all other students.

Discussions based on examples presented by teachers and from practice in the department show the importance of using visual information as a teaching style for students with ASD, in response to their preferred learning styles and individual needs. It is recommended that visual information be displayed in class to be better perceived by children and to be strictly individualized for each student.

The four elements of structured education are physical structure, schedules, work systems and visual information.

Objective 5, the assessment of teachers' perception on the period / frequency of re-evaluation / updating of the proposed objectives for the educational approach in the case of preschoolers / students with mental retardation and ASD: "at what period do you consider that the proposed objectives TSA?" - out of the total of 57 answers, 42.9% of respondents considered that the reassessment of the objectives should be done in the case of children with autism after each activity, 23.2% weekly, 28.6% monthly, 30.4 % quarterly, and only 3.6% annually. Most respondents opted for an evaluation after each activity of the proposed objective, especially in the therapeutic approach.

To the question: "for what period do you consider that the calendar planning should be drawn up for the classes of children with mental retardation and ASD? We received the following answers: 36.4% - weekly, 60% - quarterly and 10.9% - annually. Quarterly subject planning was considered the most appropriate by teachers for children with mental retardation and ASD.

Objective 6: Analysis of teachers' proposals for improving the educational-therapeutic process in school in order to adapt teaching aids and working methods for children with mental retardation and ASD.

To the question: "What proposals do you have for improving the educational-therapeutic process in school in order to adapt the teaching aids and working methods for children with ASD?" teachers considered it important to improve the therapeutic educational process in the school in the following measures:

- Adapted teaching materials - in proportion of 94.6%;

- Selection of contents according to the possibilities of assimilation of children with ASD - in proportion of 64.3%;
- Informing parents and their active involvement in continuing the educational-recovery process by generalizing in other environments the behaviors learned by the child - in proportion of 57.1%.
- Diversification of compensatory therapies offered to children with ASD in school - in proportion of 51.8%;

Ob. 7 It. (13,14), Assessment of the degree to which teachers know and apply appropriate teaching strategies to the student with ASD. The majority answers to these items are: “to some extent” 51.8% and “to a large extent” 26.8%, which shows that training programs are still needed in this area of special education.

Ob.8- It. (15, 16), Analysis of the attitude of openness and the degree of involvement of the child with ASD in teaching activities. To the question: "Does the number of children in the class allow you to take into account the special needs of each child?" 60.7% answered "to a certain extent", 16.1% "To a large extent", and 19.6% "to a very large extent". This shows the willingness of teachers to provide individualized education, and to the extent that the number of preschoolers / students with SEN / TSA allows, they aim to take into account the special needs of each child in the group / class.

All these observations and answers of the teachers come from the experience at the department in working directly with the child with autism.

The role of parents is emphasized and the importance of their active involvement in the recovery process, as well as the selection of content in accordance with the children's ability to acquire knowledge.

Parents need to be aware of their children's abilities and how to recover, the directions of action and areas of development targeted in recovery, depending on each child's strengths.

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