

IMPLEMENTATION OF AUGMENTATIVE AND ALTERNATIVE COMMUNICATION IN CHILDREN WITH AUTISM

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Abstract

Autism is a neurobiological disorder characterized by difficulties in communication, social interaction and repetitive behaviors and a limited range of interests. In this paper we will try to present the possible methods and techniques of communication with children with developmental disabilities, especially focusing on children with autism and on augmentative and alternative communication in relation to children with autism. The general purpose of the paper is the analysis and description of the positive and negative sides of communication and the representation of adequate methods of communication with autistic children. In this study, two samples from the "Alja" Kindergarten in Tetovo, which we have mentioned here as Sample x and Sample y, have been selected, and augmentative and alternative communication has been applied to them, following the changes and the success of the techniques. Methods such as observation, communication and document analysis were used in data collection. In the case of our study, the use of these techniques has been shown to be successful and we can conclude that they are useful for individuals with communication limitations and that their use should be increased. In our work with samples of children based on AAC techniques, they have shown that they are adequate and practical and can be applied in all environments, therefore we think that experts in the field of special education and communication technologies should work in cooperation to expand the use of assistive technologies in the education of children with limited communication.

Keywords: Autism, Communication, Augmentative and alternative techniques, Kindergarten.

Introduction

The reform processes that have brought many changes in all areas of life in North Macedonia in the last decade have promoted the values of a democratic society focused on the individual and his human, civil rights. Thus, the aspect of human rights, and especially children's rights, has become a priority in the approach to vulnerable social groups of children in the country. The process of synchronizing legislation with European legislation is underway and continues to progress successfully in most areas of child protection with the parallel adoption of relevant strategic documents and action plans. The achieved level of reform changes and national policies for the protection of children imposes the need to accelerate the solution of the problem of education and fair communication with children, especially those groups of children who are at higher risk. Neglecting communication and the right methods of educational approach to children with disabilities leads to the devaluation of other results achieved in the field of education and social protection, because it prevents equality and tolerance in society and indirectly encourages discrimination and social exclusion.

Considering the seriousness of the problem, the sensitivity and the number of direct and indirect target groups, and above all the responsibility towards the children and families it represents, in this paper we will try to present the possible methods and techniques of communication with children with disabilities in development, particularly focusing on children with autism and augmentative and alternative communication in relation to children with autism. In this paper, we will try to determine the success of this communication in autistic children by experimenting with concrete cases.

Communication

The word "communication", common to many languages, is derived from the Latin adjective *communis* meaning "public", "shared by many people". (Bondy, 1994) Sharing the living space with others, that is, exchanging and conveying information, is one of the essential characteristics of human beings, because human life as a social being is unimaginable without communication with other people. In addition to the social aspect, communication is key to the creation of personal identity, as self-awareness arises only through interaction with others, where feedback is received and comparison with others is possible.

Communication is the process of sending and receiving messages through verbal or non-verbal means, including oral communication, writing or written communication, signs, signals and behaviour. Simply put, communication is said to be "the creation and exchange of meaning". Media critic and theorist James Carey defines fame as "a symbolic process by which reality is produced, preserved, repaired, and transformed" in his 1992 book *Communication as Culture*, saying that we define our reality through the sharing of experience ours with others. Because there are different types of communication and the different contexts and settings in which it occurs, there are many definitions of the term. More than 40 years ago, researchers Frank Dance and Carl Larson counted 126 published definitions of communication in *The Functions of Human Communication*.

As Daniel Boorstin observed in "Democracy and Its Discontents, the single most important change" in human consciousness in the last century, and especially in American consciousness, has been the multiplication of the means and forms of what we call 'communication'. This is especially true in modern times with the advent of texting, e-mail and social media as forms of communication with others around the world. (Eferrit, 2023)

Communication of children with autism

Each person is unique, unrepeatable and in many ways different from the other. People differ in the way they observe, experience the world, act and develop. People with autism are distinguished precisely by the many specifics in their development. Their behavior patterns are particular and their interests are limited. A special problem for them is communication and social interaction in the environment where they live.

We will try, after giving some general knowledge about autism, to say in more detail about the features related to communication in autistic people. These features are observed in early childhood and communication difficulties continue into adulthood. Although not enough is known about the causes of communication impairment, it is known that some procedures aimed at improving communication skills can be effective. It is good to know that improved communication means for them greater satisfaction with life and relationships in the social environment. Autistic children's communication is very poor. Although autistic children learn to speak, they rarely use speech and use it exclusively to express physiological needs or desires. They do not use words for communication purposes. Autistic children often repeat what they are told, talk to themselves, and in general, their speech is agrammatic. (Petz, 2005)

Sometimes the speech is incomprehensible and the child reacts with anger and anxiety if his wishes and requests are not met. In addition, parents may think that their child is deaf because he does not respond to speech, research has shown that more often than not it is not true deafness. Some children may have difficulty understanding auditory stimuli in the sense that they have healthy peripheral organs for receiving auditory stimuli, so they hear sounds but do not understand them. The authors call this disorder, central disorganization of the auditory centers. (Nikolic, 1992)

In addition, autistic children have problems understanding other people's speech, as well as problems forming their own speech. Parents and therapists can and should learn the child's language over time in order to create successful communication. One of the characteristics of an autistic child's speech is that they speak in the second or third person by the age of 7 or 8, and are addressed by their first name or the pronouns "he" or "she". It is believed that the child cannot understand the message due to the mentioned disorder in the hearing center in the brain and therefore repeats the sent messages verbatim. (Nikolic, 1992)

In general, when it comes to the basic recommendations related to speech, care should be taken that it is normal for an autistic child not to understand complex messages and not to insist on them because they can lead to deterioration of the child's condition, increased fear, frustration and dissatisfaction. Addressing the child should be short and understandable. It is preferable to use sentences familiar to the child and slowly and gradually move to new and more complex ones, taking into account his abilities. What is interesting for autistic children are the different games that can last for hours. When interrupted in such activities, he will get angry. They mostly like to play alone and less with other children. It is possible that playing with other children and social games are not interesting for them because they may not understand them and therefore reject them. But the game is also a "tool" with which the child's communication skills can be improved. (Sher, 2009)

For many autistic people, the problem is self-regulation in the expression of emotions, especially when emotions are very strong. It happens that in certain situations they are overwhelmed by their emotions and do not know how to express and regulate them in the right way. Recommendations for parents are to encourage children to try to express their feelings in words. They themselves can help by giving them an example of a sentence that would better verbally express the emotional state named. Therefore, there are various situations in which an autistic child is exposed to communication difficulties, both verbal and non-verbal. The reactions of people close to the child are of crucial importance because they can influence the child's sense of safety and acceptance, thus facilitating communication and encouraging the search for social interactions. (Ozonoff, 2002)

Augmentative and Alternative Communication in Children with Autism

"Augmentative and alternative communication" (AAC) can be defined as any device, system or method that improves the ability of a child with a communication impairment to communicate effectively. It can include sophisticated devices and systems (sign language, communication boards or speech generating devices) as well as less sophisticated tools (pictures or objects used as symbols, etc.) AAC is introduced when the student does not develop communication in the way typical, or experiences significant delays, and is used to augment whatever communication the learner possesses as part of a "multi modal" system. Typical indicators for the presentation of some form of AAC may include (but are not limited to): a moderate to severe expressive speech/language disorder, an expressive/receptive language gap (the student understands more than he can say), limited speech or improving expressive language with therapy and/or the student's frustration with his/her inability to communicate messages effectively. Children using AAC systems are a very heterogeneous group. They differ not only in disorders, but also in age. The only thing they have in common is that they need alternative or adaptive means to communicate their needs and desires. The degree to which the disorder affects different areas of development, especially communication, determines the type of AAC system the child needs. In general, children who use AAC have developmental disabilities such as cerebral palsy, Down syndrome, mental retardation, autism, and brain damage that impede typical development during preadolescent development. These disabilities can be congenital or acquired. Expressive language skills are the first among the deficiencies that affect the social adaptation of

individuals with autism. Considering that most inappropriate behaviors are due to inadequacies in communication skills, these requirements have been detected by AAC systems. Individuals with autism experience different communication difficulties compared to their typically developing peers. These challenges enable them to learn, to interact, while the inability to communicate makes it difficult for them to enter social environments. Augmentative and alternative communication (AAC) includes systems designed to supplement or replace verbal or written communication for individuals with temporary or permanent communication disorders. AAC is applied to support speech and nonverbal communication (eg, body language, facial expression) or to serve as the primary method of communication when speech is absent. It is often practiced with individuals with autism due to significant communication difficulties. (Amy Goldman, 1991)

Augmentative and alternative communication systems may aim to enable some individuals with autism to communicate, while others may aim to make their existing communication skills more effective. The most important issue is that the individual needs equipment for alternative communication systems. Individuals with autism exhibit repetitive and restricted behaviors as well as deficits in social communication. AAC includes a variety of modalities that can change or enhance a person's speech and other existing communication skills. These methods are supported either unaided, usually in the form of manual signs, or by systems containing graphic symbols displayed on communication boards and books, or by technology-based devices such as speech-generating devices, including mobile technologies. (Iacono T, 2016)

Expressive communication techniques such as gestures, facial expressions, body language and signs, which the individual performs without the need for any tools, are part of forms of AAC that do not require tools

Communication books and boards, communication folders, communication wristbands, communication wallets, token sets, objects, activity boards, electronic or manual devices; are included in AAC, which requires additional tools that have been developed for assistive technology and communication purposes. There are several principles for AAC practices, when these principles are applied, it can be thought that the communication skills of students with autism who use minimal words can be unlocked. These principles can be listed as follows:

1. AAC application, which is appropriate for the learning characteristics of individuals with autism, should be combined with technology.
2. Since there is no single best audio production device or AAC application for autism, individualized AAC applications must be incorporated according to the changing needs and learning characteristics of individuals with autism.
3. Practitioners should incorporate evidence-based AAC practices.
4. AAC practices should continue throughout the day with different communication partners.
5. It should not be forgotten that AAC practices facilitate the process of acquiring speech.
6. The practitioner should have different alternative application strategies (schedule, table, etc.)
7. AAC with technology should be modified according to the needs of the individual with autism

Research Methodology

The general purpose of the paper is the analysis and description of the positive and negative sides of communication and the representation of adequate methods of communication with autistic children. The goals are planned with the aim of contributing to the development of operational and sustainable mechanisms for successful communication, through cooperation with different systems and sectors. During the realization of this research, qualitative research methods were used, more precisely, descriptive, statistical and theoretical analysis methods. Specifically, induction, deduction, observation, comparative methods. Also, the observation

and follow-up of the suspicion of the augmentative and alternative method in improving the communication of autistic children. During the research, a sample of authentic children was selected in the private nursery "Alja" in Tetovo, and augmentative and alternative communication techniques were applied to them, and the results of the research were presented. Regarding the processing of the results, the data obtained from the application of research methods and techniques was intended to highlight the ways of fair and successful communication in relation to children with autism, especially the augmentative and alternative communication technique. In this study, two samples from the "Alja" Kindergarten in Tetovo, which we have mentioned here as Sample x and Sample y, have been selected, and augmentative and alternative communication has been applied to them, following the changes and the success of the techniques. Methods such as observation, communication and document analysis were used in data collection. It is a research in which a qualitative process is followed to discover perceptions and events in a realistic and holistic way in a natural environment. In qualitative research, which adopts an inductive approach, the aim is to obtain in-depth information about the topic while trying to derive theory from the data. In the process of data collection and analysis, it is seen that the focus is on personal characteristics, comments, perceptions, impressions and contexts. As they said above, during the period of implementation of AAC communication in the nursery "Alja" in Tetovo, we tried to follow the success of this method in two children with autism who followed the educational process within this nursery.

Discussion and Conclusion

During the eight-week work, we used improvised materials based on AAC techniques, including: Student's photo on a small laminated card, preparing the schedule with laminated materials and placing the student's photo on the left side, the first photo during work with the student is to put a photo of the activity that he/she likes and does at the beginning when they come to the nursery, the second photo during work is to put a photo of the child working at the table, the third photo is a color activity. The fourth picture is an activity with letters, the fifth picture is an activity with numbers, between these activities there are things that the sample wants, such as: dancing with the song "Little star" as well as "harmonizing PUZZLE pieces. Based on the eight-week work with samples x and y and analyzing behavior, social skills, communication, attention and support during work, we have made a progress assessment from 1 to 5. That is, a rating of 1 represents communication, behaviors, social skills, totally weak while with 5 sufficient communication.

Sample X

Weeks	1	2	3	4	5	6	7	8
The behavior	1	2	2	3	3	4	4	5
Social skills	2	2	3	3	4	4	5	4
Communication	1	2	2	3	3	4	4	4
Attention	2	3	3	3	4	4	5	5
Support	1	2	2	3	3	4	4	5

Sample Y

Weeks	1	2	3	4	5	6	7	8
The behavior	2	2	3	3	4	4	5	5
Social skills	1	2	2	3	3	4	4	5
Communication	2	2	3	4	4	4	5	5

Attention	2	3	3	4	4	4	5	5
Support	2	3	3	4	4	4	5	5

We can conclude that after eight weeks of work with samples x and y, there have been certain developments and progress in their behavior and communication with their partner, in relation to themselves and their peers. During the work with the samples, it was observed that AAC techniques have certain success in developing the general behavior of children with autism. It has been observed that as a result of the use of these techniques there has been development in children's communication, there has been progress in social skills, increased attention and acceptance of support from the educator.

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