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VERBAL AND NONVERBAL COMMUNICATION OF STUDENTS WITH SEVERE AND PROFOUND DISABILITIES

Summary: The article aims to study ways of achieving human rights by offering everyone a voice, a communicational tool which will allow accessibility and access to quality education for all, regardless of the degree of disability. The main objective of the present study was to describe the profile of communication and study the use of verbal and nonverbal language at students with severe and profound disabilities. The research was conducted on a group of 60 students with severe and profound disabilities, aged 9-15 years old. The proposed objectives were to identify the level of development of verbal language to students with severe and profound disabilities; to highlight arguments justifying the need to use non-verbal communication, to identify the strengths and resources of students; to identify the presence, frequency of nonverbal communication, the palette of manifestations, all ways of expression of students with disabilities. The methodology used was a mixture of observation, communicational scales, case study and correlation analysis. Nonverbal communication mostly consists of behavioral manifestations of meeting some basic needs as receiving water, food, and pause. Lack of alternative ways of providing effective communication and social adequate tools of understanding and participating will lead to undesirable, provocative, and socially inadequate behavior.

Keywords: Alternative and augmentative communication, disability, education, nonverbal communication, rehabilitation.

European Union's current trends (European Disability Strategy 2010-2020: A Renewed Commitment to a Barrier-Free Europe), general thinking towards people with disabilities, disability legislation (Romania ratifies the UN Convention on the Rights of Persons with disabilities on 26 September 2007, the Protocol on 25 September 2008) propel and require changes at all levels and areas involving people with disabilities. Thus, given the national and international current context, as well as several recommendations and studies done, the article is aiming to investigate the fragile and vulnerable field of inclusive education in Romania: inclusion of severe and profound disabled students in a qualitative-fair educational system. The intense promotion in Romania of school inclusion principles and social development based on respect for inalienable human rights led to the integration in special schools of severe and profound disable students (which until recently were institutionalized or cared in hospital institutions). In the context of this reality, noting on our own experience, the main barrier of accessing educational activities is the fact that most of the children have severe verbal and functional impairments. Teachers are using traditional educational methods, very focused on verbal communication; the evaluation is mainly verbal, therefore inaccessible for nonverbal or severe disabled children. Teachers recognize as well that very small progress is done or even nonexistent for speech therapy as a consequence of non-adequate teaching strategies. Our aim is to highlight the urge to respect the right to communicate of everyone regardless of the type of disability or IQ. Every child/student has the right to understand what is communicated, to express his/hers own thoughts, desires, fundamental needs, they have the right to relate to others, to address the other directly and not through another person (Bondy & Frost, 1994).

Alternative and augmentative communication and strategies for the recovery of students with severe and profound disabilities has accumulated a rich experimental material (Beukleman & Mirenda, 1999, Beuklenabn, 1991). There is a discrepancy between the importance of the issue and the practical work in the school which is still delivered in a traditional way, with exclusive predominance of verbal communication. Even though communication, both verbal and nonverbal, can be released during classroom and speech therapy activities, the reality is that it has not produced a significant extent and had undesirable consequences on the performance of basic adaptive functions. School is not only a preparation for life, but the very life of a person and every child is negatively marked if during school time he or she cannot express the fundamental necessities, desires, and his or her cognitive acquisitions cannot be understood. Recently, several associations and companies were developed which advocate for providing communication systems for all people especially for those who have communication difficulties (ISAAC, Communication Matters, Mencamp etc.). Some of our research findings and observations show that there is a reluctance of teachers in using alternative and augmentative communication to students who have difficulty communicating. This reluctance is given by the fear of not affecting verbal communication, and therefore to prevent any initiative to communicate through oral or written words. Our research disproves this belief and demonstrates the effectiveness of simultaneous stimulation of nonverbal communication in the perspective of total communication. In this context, any action oriented towards optimizing the recovery process and planning the optimal therapeutic and educational intervention is crucial and welcomed, because it has to equip students with severe disabilities with real communication skills, with a communication system according to the potential and the resources of each child. The study of verbal and nonverbal communication of students with severe and profound disabilities is a topic which interest practitioners as well as careers.

The article presents an observational research on the profile of communication and use of verbal and nonverbal language at students with severe and profound disabilities. The research was conducted on a group of 60 students with severe and profound disabilities, aged 9-15 years old, from one special school from Romania and two private centers for children with autism. The proposed objectives were: to identify the level of development of verbal language to students with severe and profound disabilities; to highlight arguments justifying the need to use non-verbal communication (underdevelopment of the language at the age above 12-18 years shows clearly that it is necessary to identify alternatives to verbal communication, supporting it with non-verbal languages); to identify the strengths and resources of students; to identify the presence, frequency of nonverbal communication, the palette of manifestations, all ways of expression of students with disabilities.

The following research hypotheses were made:

- It is presumed that the verbal communication impairment and the inability to find ways of nonverbal expression lead to inadequate behaviors;
- It is presumed that various dimensions of nonverbal communication are present and can be starting points for unlocking communication;

- 3. It is presumed that students with severe and profound disabilities dispose a range of spontaneous nonverbal communication but with limited functionality and no possibility of being decoded by adults and other children;
- It is presumed that lack of language instruction affects participation, sociability, emotional stability, expressing needs;
- 5. It is presumed that students with severe mental and profound disabilities have severely impaired verbal and nonverbal communication on several aspects like pronunciation, speech, object name, expressing demands, understanding and execution of simple tasks, interactive skills; this level of communication affects essential adaptive capabilities designed to help organize behavior, security, communication and legitimate needs, group integration, gaming activities and learning etc.

To verify the research hypothesis made in this study we have used the following methods: Observation, Case Study; Assessment Tool Verbal Behavior (Scala de dezvoltare a limbajului C. Paunescu (Paunescu, 1973); Assessment Tool Nonverbal Behavior (Scale of nonverbal Communication, developed by us). The research methodology was adapted to students' age peculiarities and specifics / their learning style. We have used to collect data observation accompanied by analysis conducted during the educational program, the conversation with teachers, pedagogues, psychologists, educators; observation of situations created by students that could be used as opportunities for developing communications skills. Bellow there is a presentation of data obtained from a group of 60 students as result of applying C. Paunescu Scale (fig. 1, fig. 2, fig.3). By verbal and nonverbal behaviors to quantify the scale C. Paunescu we tried to identify the verbal behaviors used by students during school activities, and behaviors that are less developed and less used by them.

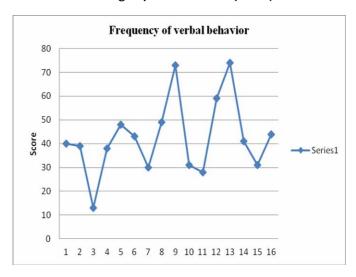
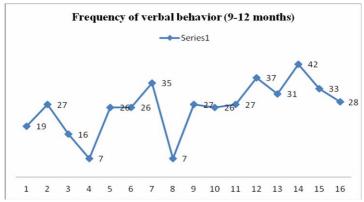


Fig. 1 Distribution answer for C. Paunescu Scale (6-9 months) for the group of the research (N = 60).

Series results obtained by students in the sample of 60 students from Scala "C. Paunescu". Y axis - C. Paunescu Scale item number; X-axis - Score obtained by subjects.

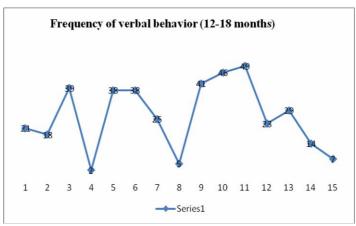
Fig. 2 Distribution answer for C. Paunescu Scale (9-12 months) for the group of research (N = 60).



Y-axis C. Paunescu Scale items;

X axis - Number of subjects expressing a certain verbal behavior.

Fig. 3 Distribution answer for C. Paunescu Scale (12-18 months) for the group of research (N = 60).



Y-axis C. Paunescu Scale items;

X axis - Number of subjects having positive behaviors.

The main findings of all data obtained as a result of observation, case study, C. Paunescu Scale show that development of language of severe and profound disabled children is seriously delayed. Language difficulties are directly proportional to the intellectual development (there are cases of discrepancy between these two levels). For example, certain students with disabilities have a pseudo-rich language (stores of stereotypical phrases, but without preserving the meaning of them) or echolalia ("empty language"), or people who cannot communicate verbally but don't have mental delays.

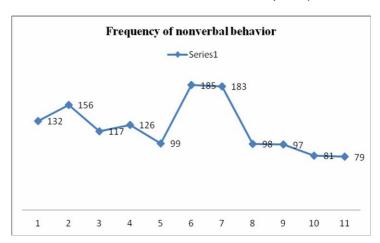
To validate and increase the objectivity of the research data gathered from subjects, we also applied a Scale of Nonverbal Communication, which intersects C. Paunescu Scale in aspects related to understanding gestures, understand the significance of gestures, understanding and execution of simple instructions, complex understanding of the prohibition etc. It was useful to compare results of the two scales to measure nonverbal behavior and identify strengths, resources that could support the incentive communication program, which are according to the results of both scales supporting verbal language with gestures, with specific tonality etc.

Below we present the results obtained by the research group after the application of The Nonverbal Communication Scale.

Table. 1. Responses for The Nonverbal Communication Scale (N = 60).

No.	Item	Points
1.	Listening	134 pts.
2.	Addressability (spontaneous initiation)	146 pts.
3.	Sharing role	106 pts.
4.	Understanding	128 pts.
5.	Eye contact	101 pts.
6.	Smile	177 pts.
7.	Laugh (defense stimul)	176 pts.
8.	Auto contact	101 pts.
9.	Stereotypes, stimulating behaviors	104 pts.
10.	Intonation	87 pts.
11.	Interpersonal distance	79 pts.

Fig. 4. Distribution of responses measuring nonverbal behaviors according to The Nonverbal Communication Scale (N = 60).



There is a significantly higher predominance of smile as a nonverbal behavior to students with severe and profound disabilities, as well as laughter as a defense, behavior that appears in inappropriate situations, situations of stress or insecurity, as a response to change and

changing environment, it is interpreted as an element of immaturity/retardation, tension and conflict. The lowest score was obtained on the following dimensions: intonation, interpersonal distance. Intonation is often found in verbal discourse and for students with severe and profound disabilities who are lacking verbal fluency allows us to explain the low score obtained in this area. Interpersonal distance involves a high level of understanding of rules and social situations, the students sample size faint observant research.

Below you can find the results of the above in a visually accessible format, using histograms.

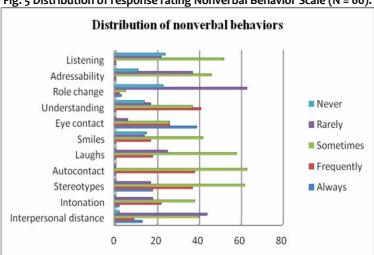


Fig. 5 Distribution of response rating Nonverbal Behavior Scale (N = 60).

The functions of communication at disabled students are the following expressing frustration, weaknesses, desires; satisfaction of basic needs. Analyzing the table above we can measure how often some nonverbal behaviors are expressed. Table analysis shows that the development of nonverbal communication at students with severe and profound disabilities from our research group has a level of development medium to low. Based on the results obtained from the two scales of verbal and nonverbal behavior, observations and analysis of questionnaires completed by teachers and interviewers with classroom teachers, but also from direct observation of communication behaviors of subjects (both during classes activities and outdoor activities, breaks, leisure time) collected and systematized in several case studies we have formulated the following **conclusions:**

- Analysis of nonverbal communication behaviors, pursued by us, is present to subjects of both groups of students in all categories of activities, with some similar individual values.
- The highest values of indices were registered to nonverbal behaviors as: auto contact and personal distance, which shows that at this age, the child feels the need for support and **does not avoid** tactile, emotional **contact** etc.
- The range of emotional expression and mimics, manifestation and expression of feelings, emotions, needs used by students, is quite poor, stereotypical.
- The lowest values were obtained by subjects with autism, the explanation could be found in the specific of autistic syndrome.

- Progress of students with severe and profound disabilities is slow and depends on many factors such as continuity and therapeutic program conducted during even after school program. Why would the child make an extra effort to work and requires appropriately a desired item, if it is accepted a more easily require other times ("Why should I say so many words, or show these items (PECS) when anyway I can receive what I want without asking?" That's why it is so important consistency and continuity in time of all the requirements provided for the child. "If you do not receive an item that you want, unless you properly formulate the request give in exchange a word, a sign or a symbol/picture, and then there is nothing left for me but to obey").
- Primary school students with severe and profound disabilities features a series of
 nonverbal behaviors that are communicative and can be a starting point for the
 activities which aims to unlock the communication and build gradually from simple
 to complex forms functional communication during any daily activity: game, table.
 Even fixations can become situations of beginning of communication, exchange of
 communication; determine opportunities to engage in active communication,
 becoming initiators of communication through an "aggressive" approach.
- It is utterly important to create opportunities where disabled students should be taught to imitate adults, then colleagues (through games like building blocks, imitation commands, role play, etc.).
- Nonverbal communicative behaviors most common are: stimulation, stereotyped behaviors, avoidance behaviors, communication behavior as crying, crying, aggression directed towards oneself or the environment, and functional communication is missing (or rarely occurs).
- Provide an effective communication system (for example when the subject makes a
 request, and his request is immediately satisfied, or the child is praised and rewarded
 with social acceptance and appreciation) contributes to decreasing negative
 behaviors, misfits. Their function is no longer valid, these behaviors have not had the
 effect of producing the need, desire (the aim of the communicative functions of
 challenged behaviors decreased), being replaced by other more socio-appropriate
 behaviors to communicate like offering a word, a sign of photos, an image, a symbol.
- The children have a greater sensitivity, understanding and establish easier communication relationship at this primary level (of nonverbal communication).
- Mentally disabled children are more sensitive to nonverbal communication than verbal, and it may become essential tool in developing strategies for networking and rehabilitation of children with severe and profound disabilities.
- To whose students the functions of their communication behaviors are for expressing frustrations, weaknesses, or desires. The need to satisfy primary, instrumental needs finds its way through nonverbal behaviors, which are often inadequate or are not quickly and correctly decoded by those who assist severely disabled children.

After applying C. Paunescu Scale for Language Development we have identified that development of verbal language to students with severe and profound disabilities are falling mostly in the early stages of life at the age of up to 3 years on average 12-18 months, but even so the language used by students is more poor, more passive, less oriented to connect with the other and more oriented towards meeting immediate needs than the language of a non-disabled child of 3 years old. Our results indicate that it can be identified more the receptive language, like recognition and identification of objects, of people, positions, gestures, with

strong emphasis on nonverbal communication. In fact, verbal communication builds on nonverbal communication. Students with mental severe and profound disabilities have a limited verbal and nonverbal communication on dimensions like pronunciation, speech, name objects, expressing demands, understanding and execution of simple tasks, interactive skills (yes, no, answer questions, the ability to show, to request). This level of communication affects essential adaptive capacities to adapt, to organize behavior, security, communication, to participate to group activities, to take part in game activities and learning etc. (According to the results obtained at Scale C. Paunescu), which confirms the hypothesis no. 5 of the present study.

Data obtained after applying C. Paunescu Scale facilitated the arguments justifying the need to use non-verbal communication: underdevelopment of the language at the age of 12 - 18 years old clearly indicates that it is necessary to identify alternatives to lack or non-understanding of communication/verbal language. Most students have achieved high scores in items not involving verbal expression, the production of words, and communication through gestures, so nonverbal communication remains an essential resource to stimulate communication function at severe and profound disabled children.

Nonverbal Communication Scale measured the frequency of nonverbal communicative behaviors, which mostly consists of behavioral manifestations of meeting some basic needs as receiving water, food, and pause. Unfortunately, these behaviors are expressed not in an appropriate way, often by shouting, expressing anger, crying. So according to the results of our investigation and complemented by observations recorded during case studies launched at the beginning of our research our hypotheses were confirmed. Lack of alternative ways of providing effective communication and social adequate tools of understanding and participating will lead to undesirable, provocative, and socially inadequate behavior. These behaviors can be replaced with learning some new nonverbal behaviors as presented during some formative evaluations done during this study. Results of Nonverbal Communication Scale, as well as our observations and records of the case studies confirm the hypothesis that students with severe and profound disabilities have a limited and poor spontaneous nonverbal communication. The communication expressed has limited functionality and there is no guarantee of the possibility to be decoded by adults and other children without training sessions in nonverbal communication for parts involved, disabled and careers.

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Cristina Dumitru Tabacaru is currently working as a lecturer at the University of Pitesti, Faculty of Educational Sciences, where she is teaching Special Education and Effective methods of Learning. For more than 10 years she was a Special Education Teacher in a school for physically and mentally-challenged children in Stefanesti, Romania. She has gained solid knowledge with regard to the educational system in Romania and in Moldova due to her extensive work with the Ministry of Education within CEEPUS National Office, as an active member in the International Relation and European Integration Department. Some of her strengths are inclusive education and community and regional educational programs (part of the European programs). Her academic background consists of a Bachelor's Degree in Special Education, a Master's Degree in Special Rehabilitation and Therapy and Doctoral Studies in Educational Sciences.