

## USE OF NON-VERBAL COMMUNICATION IN PRESCHOOLERS EMOTIONAL DEVELOPMENT

Anemona PĂUNESCU<sup>1</sup>, Elena-Simona INDREICA<sup>2</sup>

<sup>1</sup> Kindergarten no. 5, Braşov, Romania

<sup>2</sup> Transilvania University in Braşov, Romania

### ABSTRACT

*This article is based on a study which consisted of the analysis of the non-verbal language used by preschoolers and materialized into a didactic experiment that started off with the assumption that emotional development in preschoolers can be achieved by means of non-verbal communication, with the aim of optimizing the relationship among the group members. The experimental group and the control group, homogenous from a psycho-social and educational viewpoint, consisted of 20 children, each. The experiment unfolded over the period of a school year and focused on the preschoolers' acknowledgment of their own emotions and on the identification of their colleagues' emotions by decoding non-verbal indicators. The used methods and instruments were as follows: non-verbal language encoding/decoding tests, sociometric tests and an emotional indicators observation chart. Both the pre-testing and the post-testing assessed the non-verbal communication encoding/decoding and the emotional development degree of the two groups (EG and CG). The results confirmed the general hypothesis as well as the specific hypotheses. As a general conclusion: the acknowledgement of one's own emotions, through the analysis of non-verbal indicators, is essential to acquiring all the other(s) emotional skills, which are the source of social adaptation.*

**KEYWORDS:** *communication, non-verbal language, emotional development.*

### 1. INTRODUCTION

Preschool is a period when children make use of intense receptiveness, sensitivity and physical flexibility. Hence the necessity to enhance the preschooler's creative potential, to shape and develop his/her cognitive, affective and social action self. One of the best ways to do so is permanent communication [1].

Communication is a support used for shaping the mechanisms of the child's thought memory, imagination and intellectual development. With the help of communication, the pre-schooler succeeds in detaching from the material reality, gaining experience [2]. By communication, one exchanges meanings; there must be a connection between the participants in the communication process – sender and recipient –, at least one given by a common code used for encoding and respectively, for decoding the message to be transmitted [3].

## **2. COMMUNICATION AND EMOTION**

Man is a social being. Above all, man needs to communicate. Nevertheless, what he first communicates are his emotions.

### **2.1. Non-verbal Communication**

In the context of communication, non-verbal language weighs the most [4]. Even though it has been present in the relationships between people since humanity began, non-verbal communication gained increasing importance in the past the past 40 years, given its use at such a large scale in relation to verbal and paraverbal communication.

Non-verbal communication is the process of communication by means of which messages are sent without the use of words. Non-verbal communication is accomplished by gestures, touch, body language or posture, facial expressions and eye contact [5].

Likewise, non-verbal communication can also be accomplished by means of certain objects, such as clothing or hair-combing or walking. Symbols are also means of communication and speech can include non-verbal elements known as paralanguage: tone, rhythm, intonation, accent, emotions and speech style. Written texts can also include non-verbal elements given by style, spatial setting of words or by the use of emoticons.

The way in which we listen to what we are told, the means of looking, the way we move and react, show our interest, our desire to connect with the others and the trust we give them, or, on the contrary, our lack of interest, mistrust or confusion. Likewise, non-verbal communication can bring forward our true thoughts, feelings or intentions [6]. That is why the correct interpretation – as well as the correct transmission – of non-verbal messages is important and identifying the true mental state of the ones we communicate with depends on the correctness of our interpretation of non-verbal messages.

Nevertheless, a second extremely important aspect in relation to non-verbal communication is given by its universality and its applicability in all fields of life. The signals transmitted through non-verbal communication play the following roles [7]: *repetition, substitution, completion, misguidance, regulation and emphasis.*

### **2.2. Non-verbal Indicators of Emotions**

*Facial expressions.* The human face is extremely expressive, capable of rendering infinite emotions without saying a word. As opposed to other forms of non-verbal communication, facial expressions are universal and moreover, they are born, deeply imprinted in our brains, thus, they do not fall into the category of acquired skills. Happiness, sadness, anger, surprise, fear, disgust and contempt are expressed the same way, irrespective of gender, age, race or culture. Such affirmation were also made by Darwin [8], whose conclusion was

that “*the same physical state is expressed worldwide with a remarkable homogeneity*”.

Paul Ekman has studied facial expressions closely and his conclusions are extremely important. He is the one who supported the idea of the facial expressions’ and of emotions’ universality starting from the premise that all people have the same number of facial muscles [9]. He concluded that, emotions – which cause the tension of different muscles – lead to the same expressions in all parts of the world. In order to decode basic emotions (happiness, surprise, fear, anger, disgust or sadness) Ekman and Friesen implemented a *Facial Action Coding System* in order to identify the so-called action units that can be anatomically distinct and visually distinguishable by interlocutors.

To mime is the expression of feelings, thoughts and emotions. It deals with the movement of facial muscles, with its aspects and mimic game. It serves both for the expression of one’s own feelings, as well as of other’s feelings in the case of actors. Among all the body’s reactions, to mime is the one that reflects feelings directly. Facial muscles consist of 80 large and small muscles, which express a limited number of expressions by means of different combinations. Each side of the face is coordinated by a cerebral hemisphere; the right hemisphere coordinates the left side and vice-versa that is why most people find it easier to smile with the left side of the face than with the right one.

*Body language of hands.* Manual communication is among the most demonstrative means of expression our body offers. We make use of our hands to show what we think, to make our desires known and to show our way of being. Hands can express what words cannot or refuse to express. Likewise, hands can account for our relationship with the surrounding world, as a gauge of our social skills or an indicator by means of which we shape our external relations. The position of hands and the gestures we make using our hands betray the character and the behaviour of a person. Similar to adults, the children try to dissimulate emotions using the face and the hands and as we go down from the face towards the feet, they are less conscious of these movements which can betray them [10].

*Body language of legs.* The French scientist Marcel Sandrail said that the mystery of man is not what the man hides but what he shows to the others. Starting from this quote, it is interesting to decipher someone’s thoughts and to pay attention especially to facial expressions, paralanguage and gestures, but how many of us are paying attention to the legs of our interlocutors. Preschoolers are often express themselves naturally and spontaneous by moving their legs [11].

A lateral movement of the legs from a sitting position can indicate joy, happiness. In exchange, the repeated front crossing of the legs during the

activity can be understood as impatience or disinterest for the unfolding activity.

*Posture.* The perception upon people is affected by the way in which they sit or stand and by the way they walk or hold their heads. The way in which we move or stay still transmits a lot of information to the others. Children are very expressive in this regard. In order to become the leader in their group among their group of friends, they will have a firm posture, keep their backs straight and hold their heads up, as well as holding their shoulders backwards, all of these translating self-confidence and determination. At the same time, they can express reservation and even fear through a bent body position, with their shoulders facing forward and with their head tilted downwards. The simplicity and spontaneity of gestures, manifested freely and uncontrolled gives us precious indications of the child's affective state [12].

*Gestures.* Gestures are the most frequent form of non-verbal communication. People wave their hands, point at things, make gestures when they speak, nod for approval or shake their heads for disapproval, raise the shoulders when they do not know something, raise one shoulder when they have something to hide or move their feet when they are impatient etc. Desmond Morris talks about six gesture categories, i.e.: expressive gestures copied gestures, schematic gestures, symbolic gestures, technical gestures and encoded gestures. Roger Axtell [13] focuses only on three important gesture categories: instinctive gestures, encoded (or technical) gestures and gestures acquired through the culture to which the persons using them belong.

*Eye contact.* The way in which we look at someone can communicate many things, such as: interest, affection, hostility or attraction. Among the ones that analysed the functions of eye contact are Michael Argyle and Janet Dean [14], who underline the importance of eye contact in different situations.

### **3. METHODS AND RESULTS**

This article is based on a study of the analysis of non-verbal language used by pre-schoolers and then materialized into a didactic experiment.

*Scope of study* – the analysis of methods by means of which preschoolers should be able to develop and to optimize their emotional and communication skills.

Among the *objectives*, we mention: identifying and analysing preschoolers' non-verbal behaviours; and identifying and analysing preschoolers' emotional language elements.

*Hypothesis:* pre-schoolers' emotional development can be improved by means of non-verbal communication, aiming at the optimization of relationships among the group members.

The experimental group (EG) and the control group (CG), homogenous from a psycho-social and educational viewpoint, consisted of 20 children aged

between 5 and 6 years old. The criteria based on which the research groups were analysed, were as follows:

- children’s age;
- gender;
- the environment (rural/urban) where they grew up;
- the conditions in which they lived;
- their family members.

The experiment unfolded throughout a school year (2011-2012), with focus on the preschoolers’ acquaintance with their own emotions and on identifying their colleagues’ emotions by decoding non-verbal indicators.

The used *methods and instruments* were the following:

- non-verbal language encoding/decoding tests;
- sociometric test;
- emotional indicators observation chart.

Both the pre-testing and the post-testing assessed the non-verbal communication encoding/decoding and the emotional development degree of the two groups (EG and CG). This article will only indicate the results of the sociometric test.

In the *pre-testing* phase, the research starting point consisted in the sociometric study. Preferences by pairs were observed in both groups, the number of rejections being rather high. Based on the results, we planned for the EG in the experimental group activities that aimed at positively orienting the relationships among the group members.

Nevertheless, by comparing the data obtained for the preference indicators (PI) we may observe that the PIs obtained by the CG have closer values and the differences are not high (the maximum value is 0.84 and the minimum value is -1.42, while for the EG, the maximum value is 1.10, and the minimum value is -1.90) denoting a better homogeneity of relationships in the CG.

During the same pre-testing phase, *three encoding tests* were applied to evaluate the degree in which children are able to encode verbal messages and *three decoding tests* aimed at analysing the extent in which preschoolers are able to decode non-verbal messages (unable, to some extent, to a high extent, to a very high extent, fully capable).

Table 1. Encoding / decoding tests

Test type	Content
Encoding test no. 1	Recognizing and rendering some facial and body expressions
Encoding test no. 2	Verbal and non-verbal contacts between the children
Encoding test no. 3	Correctly recognizing and labelling emotions
Decoding test no. 4	Recognizing and rendering some facial and body expressions

Decoding test no. 5	Verbal and non-verbal contact(s) between the children
Decoding test no. 6	Correctly recognizing and labelling emotions

**Description of the experiment** unfolded with the experimental group:

In order to enhance the positive emotional and behavioural development of preschoolers aged 5 to 7 years old, and to develop their skills understanding non-verbal messages and others’ emotions, an *experimental activities module* was applied. The experiment focused on preschoolers’ being aware of their own emotions and on identifying their colleagues’ emotions by decoding non-verbal indicators.

Number of encounters: 34 out of which the first two targeted the application of the initial evaluation tests, the following 30 encounters (once a week) involved the development of the experimental programme during which the activities were planned within the optional course “*I feel, I create, I express*”. (*Belonging to the annual study theme “With what and how do we express what we feel?”*), followed by the last two encounters aimed at applying the final evaluation tests.

Table 3.14. Structuring encounters by thematic contents

Thematic content	No. of encounters
Knowing myself and the others	4
Recognizing and rendering of facial and body expressions	4
Verbal and non-verbal contact(s) between children	4
Development of emotional skills	5
Development of social skills	5
Development of empathic skills	4
Mini-relaxation techniques through tactile-kinesthetic action	4

Applied techniques: spontaneous emotional expression exercises, games for overcoming inhibitions and emotional blockages, empathy exercises, laughter exercises, helping others and camaraderie games, role-play, sensory and emotional expression techniques and games, fantasy techniques and movement and dance techniques.

Form of accomplishment: activities at the level of several curricula: activities by experiential fields, personal development activities, freely-chosen activities.

Form of organization: frontal activities, activities by small groups, individual activities.

The intervention through the experimental programme consisted of 30 activities done only with the EG, aimed at developing and optimizing their emotional and social skills, at training the preschoolers’ skills of decoding and

encoding non-verbal messages and of understanding the others' emotions. We followed the individual progress in relation to the prior stages rather than labelling, ranking or classifying the children. The observation of their behaviour was made at any point of the day, during the activities. The written or oral examinations and the applied test unfolded under normal conditions. The observation was carried out in an on-going basis, throughout the entire period spent by each preschooler in the kindergarten and followed the objectives of the planned contents. The unfolded activities targeted the development of some emotional and social skills, starting from the premise that this would significantly contribute to the development of other skills, which would facilitate the child's accommodation to the environment's requirements. Thus, we observed and analysed the way in which the preschoolers live and express their emotions, their capacity to understand and to recognize emotions and their emotional regulation capacity, and subsequently, we aimed at developing and optimizing such skills.

During the *post-testing phase*, the same tests were applied as during the pre-testing phase. In order to appreciate the child's performance, his developmental rhythm and his progress (or regression), we needed to repeat some assessment situations related to the main objectives of educational intervention. Thus, the sociometric test was repeated first for the EG and the obtained results were compared to or with the initial ones. During this phase, we can say that a homogenization of the EG can be noted, meaning that the subgroups did not remain the same and the children named many other game partners. It was surprising that they did not hurry to name the rejected children, they weighed the motives of their choices very carefully and made more choices than rejections. The 5 marginalized children were not nominated as frequently any more, indicating that the preschoolers acquired certain emotional skills and that they were capable of empathy. The group bonded, but this required a sustained activity and time. Preschoolers are capable of transmitting through their behaviours (that they can show) understanding and support to a person who is struggling emotionally.

Comparing the initial sociomatrix with the one that resulted after the final testing showed that one may note a data unification, meaning that the leaders of the group are nominated relatively "the same number of times", two of the most popular children registering an equal number of elections. This time, the number of the group leaders grew by one, while the ones with the "accepted" status were nominated more, by one. Comparing the initial results with the ones obtained after repeating the sociometric test for the CG it can be said that, even though initially the group was more cohesive as compared to the EG, the evolution of the preschoolers in the CG is not significant at the level of relationships within the group. The nominations made by the children remained relatively the same and their preferences in relation to their play partners did not

vary by much. Once again they nominated relatively the same number of rejections as during the initial phase, while the children that formed the EG did not hurry to name the rejections, they weigh much more carefully their choices, explaining their answers and indicating more choices than rejections.

The children that were initially marginalized within the CG received the same number of nominations in the final phase, this being a sign that preschoolers did not acquire certain emotional skills and that they are not as empathic as the preschoolers that formed the EG – the group that bonded. The initially formed subgroups within the CG failed to “open” towards other members, remaining with the choices they made initially, still preferring the children they knew, former colleagues or neighbours. There were few cases in which they nominated others and, from the comparative analysis of the initial sociomatrix with the one drafted after the final testing, for the EG, we note a data unification in relation to the number of choices which is not the case for the sociomatrices drafted for the CG.

Analysing by comparison the results obtained by the two groups in the final phase, it may be stated that the EG registered PI values significantly improved both in relation to its own evolution in the initial phase, as well as in relation to the CG in the initial and in the final phase, while the CG regressed, their PI values dropping significantly

#### **4. CONCLUSIONS**

The results confirmed the general hypothesis as well as the specific hypotheses. It is obvious that the activities the EG group participated in led to the improvement of these values, to significantly improving relationships within the group and to much better attitudes and behaviours. Consequently, the progress registered by children following the experimental intervention demonstrated that preschoolers are capable of developing emotional and behavioural skills at the preschool age. They developed their capacity to understand non-verbal messages and the others’ emotions, which helped them, settle their conflicts. Thus, we succeeded in guiding the children into the direction of an open, authentic and spontaneous emotional expression. The improvement contributed to the discovery of the children’s empathic skills through the development of spontaneity, by freeing the imagination and by discovering their creative potential. They developed the capacity to identify the cause of an emotion and to understand the consequences of emotions. Their behaviour improved, as they now use both empathic as well as non-verbal communication. They work well organized in teams and they learned how to cooperate with their colleagues.

On the other side, analysing cumulatively the data obtained by means of all the instruments of the research for the CG, we may conclude that the obtained results did not reach the level of the results obtained in the EG’s



case. The reason for which the children within the CG continue to behave inappropriately is that they did not learn how to adequately manage certain feelings (anger, aggressiveness, rejection); they did not easily identify alternate emotional reactions and they acquired few emotional regulation strategies. They establish and maintain friendships with greater difficulty than the ones in the EG and they scarcely recognize their own and others' feelings, they poorly identify emotions, they express their emotions by means of non-verbal language with difficulty and their vocabulary is poor when they are asked to find the verbal labels that correspond to certain emotions. Moreover, preschoolers in the CG showed their capacity to identify the consequences of certain behaviours but they could barely associate certain contexts with the manifestation of specific emotions.

For the age level of the studied children, the best results were obtained during the activities which identified the feelings they had, giving examples of such feeling and expressing them in various contexts and by different means, others than by verbal expression. Positive social relationships are formed when children understand the meaning of different behaviours, when they are capable of adapting to different social contexts and when they are involved in group activities. Interaction with their close peers plays a central role in the child's socio-emotional "health", offering the feeling of stability, security, affiliation and thus feeding the child's desire to learn. The relationships established by the child with others involve safety, receptiveness, availability and emotional comfort. Little by little, the children develop cooperation, negotiation skills, the capacity to lead and to be led, to make friendships and to express feelings in a socially-acceptable manner. Decoding or the correct „reading” of emotional messages represents a source of information that guides the way in which we will behave. Children that benefit from repeated exposure to emotional reactions and to discussions of such reactions in their family and later on, in kindergarten, succeed more easily to correctly interpreting the messages sent by others.

Preschoolers' difficulties in recognizing others' emotions creates problems in correctly interpreting messages with emotional content, as well as in transmitting an adequate message in answer to their emotions. Thus, problems in making friendships may occur as well as conflict situations which are characterized by aggressiveness. Negative behaviour may generate conflicts that could be prevented if the interpretation of the other's emotional reaction would have been adequate. By teaching the children to communicate their emotions, (verbally and non-verbally) they can express themselves adequately, which will help them to accept more easily the point of view of others and to negotiate solutions in conflict situations. When working with preschoolers, the adequate transmission of messages is of utmost importance. A hug, a caress, a smile or a joke can be important sources of strength in the educator-child

relationship. The discussions about their favourite activities or about a funny story show the children our interest in them.

As a general conclusion: the acknowledgement of one's own emotions, through the analysis of non-verbal indicators, is essential to acquiring all the others emotional skills, which are a source of social adaptation.

## REFERENCES

- [1] Neacșu, I., (1999). *Instruire și învățare*, București: Editura Didactică și Pedagogică.
- [2] Golu, F., Ioniță, C. (2009). *Aplicații practice ale psihologiei copilului, Dezvoltarea personală - ca program de educație alternativă*, București, Editura SPER.
- [3] Tran, V., Stănciugelu, I. (2003). *Teoria comunicării*, București, pp.17.
- [4] Larson, Ch. (2003) *Persuasiunea. Receptare și responsabilitate*, Iași: Editura Polirom.
- [5] Reiman, T. (2010). *Limbajul trupului*. București: Curtea Veche.
- [6] Drukman, D., Rozelle, R. M., Baxter, J. E. (1982). *Nonverbal communication. Survey, Theory and research*, Beverly Hills, Sage Publications, Inc.
- [7] Fârte, G.-I. (2004). *Comunicarea. O abordare praxiologică*, Iași, Casa Editorială Demiurg
- [8] Chelcea, S., Ivan, L., Chelcea, A. (2005). *Comunicarea nonverbală: gesturile și postura*, București, pp. 14.
- [9] Pânișoară, I. O., (2003) *Comunicarea eficientă – metode de interacțiune educațională*, Iași: Editura Polirom.
- [10] Turchet, P. (2005). *Sinergologie*. Iași: Polirom.
- [11] Săucan, D.-Șt. (2002). *Comunicarea didactică. Expresivitate și stil*, București: Editura Atos
- [12] Șoitu, L. (2001). *Pedagogia Comunicării*, Iași: Editura Institutul European
- [13] Axtell, R. E. (1993). *Do's and Taboos Around the World*, 3rd edition, New York: John Wiley and Sons.
- [14] Argyle, M., Dean, J. (1965) *Eye contact, distance and affiliation*, *Sociometry*, 28, 289-304.