# DRAWING IN OPTIMIZING PRE-SCHOOLERS' SOCIALIZATION

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**Abstract:** *The present paper's topic is the children's socialization, searching for ways to improve children's relationships in formal environments. The investigation started from the premise that the optimization of children's socialization in the kindergarten environment could be achieved through the use of the artistic and plastic language, the free drawing being the basis for the transmission and reception of messages. Our sample consisted of 50 pre-schoolers coming from different kindergartens. This ascertaining research was based on, among other methods, the sociometric test and the analysis of activity products (26 items with multiple indicators). The obtained results confirmed the hypothesis, concluding that the use of artistic and plastic language in encoding and decoding messages optimizes the socialization among children in the kindergarten environment.*

**Keywords:***drawing; socializing; preschool;*

## 1. Introduction

Theoretically, the artistic and plastic language is composed of only three elements (Davido, 1998; Crotti, 2010; Davido, 2017): the plastic point, the plastic line and the spot of colour. Practically, however, the possibility of artistic expression of ideas and feelings, through this language, knows no limits.

The fascination for drawing, for the "traces" left by the pencil on a sheet of paper, begins early (Baldy, 2017; Crotti, 2010), and the motric pleasure of scratching gradually turns into the motivation to encode messages and translate them into artistic images (Wallon et al., 2012), up to the shaping of the cultural environment (Poon, 2017). The steps taken by children in drawing go from scratches (Wallon et al., 2012) to the desire to find meaning in graphic signs (Baldy, 2017) and to complex ways of graphic rendering with the purpose of transmitting a message, which reflects cognitive acquisition (Papalia et al., 2010).

The studies on the evolution of drawing in children (Luquet, 1913; Malrieu, 1950; Davido, 1998; Quentel, 1992; Picard, 2005; Machon, 2009) and on deciphering the messages transmitted through drawing are numerous (Davido, 2017; Picard, 2007 ). Also, the specialty literature abounds in studies that address the psychological analysis of drawings (Malrieu, 1950; Crotti, 2016; Wallon et al., 2012; Farokhi & Hashemi, 2011). All of these sources determined us to focus on investigations that take into account the impact of artistic imagery on changing behaviours. For the topic of the current research, socialization has been at the heart of our research.

Cognitive and developmental approaches help us see the changes in children's behaviour as well as their abilities. Behavioural changes, as well as artistic abilities, come from changes in the level of knowledge and intellectual skills (Harwood et al., 2010). This qualitative identity (Piaget & Inhelder, 2005) grafted on the pleasure of drawing (Wallon et al., 2012) turns into the motivation to communicate through drawing. Knowing the role of social interaction in learning (Vigotki, 1971), acquiring knowledge and cognitive abilities can be accomplished when the kindergarten environment favours the development of socialization. It is possible to identify the level of a pre-schooler's maturation (Wallon et al., 2012) through their desire to make a drawing (Quentel, 1992), which can be manifested in the

zone of proximal development (Papalia et al., 2010). But, can the drawing contribute to optimizing socialization?

## 2. Purpose of the study

Starting from the premise that the level of socialization is higher for the children who draw, the ascertaining study aimed at: identifying the relation between the artistic and plastic language and the children's socialization in the kindergarten environment; detecting differences in socialization between children who have a developed artistic and plastic language and those who do not have it; establishing relations of attraction - rejection among the members of the groups; analysing free choice drawings in order to establish the complexity of the use of the artistic and plastic language. The working hypothesis was: the use of artistic and plastic language in encoding and decoding messages optimizes the children's socialization in the kindergarten environment.

## 3. Method

### *3.1. Sample and procedure*

The investigation was carried out on a group of pre-schoolers (N = 50), from three "big" groups (the oldest children in Romanian kindergartens), coming from two kindergartens in Braşov. The group composition in terms of gender was of 13 females and 33 males. The sample was homogeneous in terms of age, socio-economic environment and educational conditions.

### *3.2. Material and Methods*

In order to collect the data, we used: the sociometric test and the product analysis grid.

*The sociometric test* (Iluţ, 1997) was used for constructing the sociogram of the formal groups to which the respondents belonged. The sociograms of the two groups were based on two questions addressed to each preschool: "Who do you want the most to play with?", with a range between +1 and +3, where +3 is the preferred person for the game, and "Who do you want the least to play with?", with a range between -3 and -1, where -3 is the least preferred person for the game.

*The product analysis grid* comprised 26 items: I1: The scratch lines of the drawing (1 - very fine, ..., 5 - very intense); I2: Frequency of curved lines; I3: Intensity of lines; I4: Disproportion of the represented objects; I5: Complexity of graphical forms (1 - very small, ..., 5 - very large); I6: Types of lines used (1 - one type of line, ..., 5 - five types of lines); I7: Dimension of the drawing; I8: The diversity of the forms represented in the drawing (1 - very small, ..., 5 - very large); I9: The point where the drawing begins (1 – on the very left, ... 5 – on the very right); I10: Frequency of spots of colour in the drawing: (1 - very small, ..., 5 - very large); I11: Phenomena encountered in drawing; I12: Eye-to-hand coordination; I13: Drawing geometry (1 - very little, ..., 5 - very much); I14: The attitude shown in the creation of a free drawing (1 - very inappropriate, ..., 5 - very appropriate); I15: Locating the drawing in the first drawing phase; I16: Positioning of the drawing (1 – on the very left, ..., 5 – on the very right); I17: Use of colours (1 - very few colours: 1-3, 2 - few colours: 4-6, 3 - medium number of colours: 7-9, 4 - many colours: 10-12, 5 – very many colours: more than 12 colours); I18: Nature of the colouring instruments used; I19: The presence of archetypes; I20: Use of the sheet of paper in drawing. I21: Colour diversity; I22: The manner in which they express themselves in the drawing; I23: Artistic expressivity (1 - very little emphasized, ..., 5 -

very emphasized); I24: Omissions in drawing characters (1 - very few omissions, ..., 5 - many omissions); I25: Encoding of the plastic message (1 - very little, ..., 5 - very much); I26: Naming the plastic message (1 - very vague, ..., 5 - very detailed).

## 4. Findings and results

The scores obtained on the basis of the *Product Analysis Grid* constituted a starting point for both the quantitative analysis (total score for the drawing, as an indicator of the level of operation with artistic and plastic language) as well as for the qualitative analysis.

Fig. 1 – Examples of drawings and their scores (92; 98; 74)

The point where the drawing begins (the focal point of the plastic image) - tabel 1, the use of colours (example for brown - Table 2), the vertical movements made in a limited space (Table 3) and the tendency to occupy all the drawing space (Table 4) are a series of indicators reflecting the dimension of socialization.

From the analysis of the data on the starting point of the drawing we can say that 18 respondents tend to feel a high degree of fear (the focus of the plastic image at the edge of the sheet, to the left, the first register), 21 which tend to feel fear (18 focusing the plastic image on the left of the sheet, the second register, and the 3 to the right, the fifth register), 11 show age-specific egocentric tendencies (central focus of the image, the third register of the sheet).

Tab. 1 - The point where the drawing begins

| | | Frequency | Percent | Valid percent | Cumulative percentage |
|---|---|---|---|---|---|
| Valid | very left | 18 | 36.0 | 36.0 | 36.0 |
| | left | 18 | 36.0 | 36.0 | 72.0 |
| | centre | 11 | 22.0 | 22.0 | 94.0 |
| | right | 3 | 6.0 | 6.0 | 100.0 |
| | very right | 0 | 0 | 0 | 100.0 |
| | Total | 50 | 100.0 | 100.0 | |

The socialization of children through drawing can also be illustrated by the colours used. Each colour has a symbol, but the colour brown highlights the precarious social adaptation of the pre-schooler. There is a moderate tendency to use this colour, but - as can be seen in table 2 - a significant percentage (22%) show difficulties in social adaptation (fact also revealed by the sociogram for the respective respondents).

Tab. 2 - Using the colour brown

| | | Frequency | Percent | Valid percent | Cumulative percentage |
|---|---|---|---|---|---|
| Valid | very little | 4 | 8.0 | 8.0 | 8.0 |
| | little | 12 | 24.0 | 24.0 | 32.0 |
| | moderate | 23 | 46.0 | 46.0 | 78.0 |
| | much | 11 | 22.0 | 22.0 | 100.0 |
| | very much | 0 | 0 | 0 | 100.0 |
| | Total | 50 | 100.0 | 100.0 | |

Depending on the use of the sheet of paper - movements and space occupation, two types of respondents are distinguished: the sensitive ones (with social isolation tendencies), who occupy the sheet with few vertical movements and the enthusiastic ones (with social expansion tendencies) who strive to fill in all space of the sheet with vertical movements, often even superposed (Table 3).

Tab. 3 - Vertical movements made in a limited space

| | | Frequency | Percent | Valid percent | Cumulative percentage |
|---|---|---|---|---|---|
| Valid | very few | 7 | 14.0 | 14.0 | 14.0 |
| | few | 12 | 24.0 | 24.0 | 38.0 |
| | moderate | 6 | 12.0 | 12.0 | 50.0 |
| | many | 5 | 10.0 | 10.0 | 60.0 |
| | very many | 20 | 40.0 | 40.0 | 100.0 |
| | Total | 50 | 100.0 | 100.0 | |

Regarding the occupation of space of drawing, the social expansive ones are those that occupy the whole space (Table 4).

Tab. 4 - The tendency to occupy all space of drawing

| | | Frequency | Percent | Valid percent | Cumulative percentage |
|---|---|---|---|---|---|
| Valid | very little | 1 | 2.0 | 2.0 | 2.0 |
| | little | 8 | 16.0 | 16.0 | 18.0 |
| | moderate | 15 | 30.0 | 30.0 | 48.0 |
| | much | 15 | 30.0 | 30.0 | 78.0 |
| | very much | 11 | 22.0 | 22.0 | 100.0 |
| | Total | 50 | 100.0 | 100.0 | |

The results obtained at the socialization dimension and at the use of the artistic and plastic language dimension were similar for the respondents.

The correlation coefficient of .46 is statistically strongly significant at a .001 threshold, which demonstrates a close link between the complexity of using the artistic and plastic language in rendering the plastic image and the level of socialization of children in the kindergarten.

Tab. 5 – Correlations between socialization and drawing

| | | Sociometric points | Drawing points |
|---|---|---|---|
| Sociometric points | Pearson Correlation | 1 | ,462** |
| | Sig. (2-tailed) | | ,001 |
| | N | 50 | 50 |
| Drawing points | Pearson Correlation | ,462** | 1 |
| | Sig. (2-tailed) | ,001 | |
| | N | 50 | 50 |

**. Correlation is significant at the 0.01 level (2-tailed).

## 5. Conclusionsand Discussion

Drawing, a very often present activity in the kindergarten and also one of the children's preferred pass time activities, can illustrate how they feel, how they relate to others, and even conflicts that may arise among children. The investigation started from the premise that the level of socialization is higher for the children who draw, which was confirmed by the confirmation of the hypothesis.

Achieving the research goals opens up new investigative opportunities concerning the development of the pre-school children's abilities to communicate through free-form drawings and makes it possible to design an experimental-ameliorative design intervention regarding the level of socialization.

The results can contribute to a better understanding of the preschools' behaviour by teachers, to the ailment of the difficulties associated with adaptation to the kindergarten environment, but also to the design of activities through which to develop the aptitude for drawing.

However, because of the low number of respondents, the results cannot be extrapolated to all pre-school population. Research is under way by expanding the number of participants, also taking into account other areas.

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