



Global approach regarding development process of small child

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Abstract

The main goal of the paper is to point out how, at the age of small children, perception, respectively object evaluation is influenced by some psychosocial factors such as social status and socio-emotional status of objects owners. It has been started from the following hypothesis: regardless of the real object dimension children will overestimate the object which belongs to persons with social and socio-emotional status considered to be superior. We have used 3 special tasks such as: 1. "colored pencils"; 2. "rows of pieces"; 3. "colored cubes". Although it was some differences among tasks for each of them were three alternatives: a) equal or unequal objects regarding one dimension, children having recommendation to appreciate which one is bigger; b) equal or unequal objects belonging to a preferred and to a nonpreferred teacher; c) equal or unequal objects belonging to a preferred teacher and to a kindergarten principal. Children had the same task: to say which object is bigger. We were obligated to put the questions related to Piaget's theory. Therefore we used 3 Piaget's tasks such as „glases", „cups and plates", and „plasticine". During the experimental period we strived to putt all children in the same conditions being in this way protected against disturbance factors. Finally after Research has been done on a group of 131 children having age between 3 years and half and six years. Finally our hypothesis has been confirmed by the results of research which have direct implications on how to organize the program of educational activities with small children. The conclusion is the necessity to approach globally the process of child development.

1. Introduction

For several years, we have also dealt, in our research activity, with the evaluation of the psycho-behavioral development of young children. We conducted such activity at several kindergartens in Bucharest, the tests being applied by students belonging to the Master Program "Psycho-diagnosis and Psychotherapy". Thereby, we had the opportunity to discover the existence of "masking behavior" phenomenon [1], which affects the level of objectivity in the evaluation made by the teachers regarding the behavioral acquisitions of the young children. It was also found that, in the perceptual-cognitive assessment activity of stimuli, children are influenced by particular psychosocial factors, such as social status and emotional-affective status of the person holding the objects that are being evaluated [2] .

2. Theoretical Issues

We have initiated an investigation to another kindergarten, using carefully selected tests, to see to what extent this phenomenon exists. The conclusion we reached, and which was already communicated, led us to J. Piaget's theory and conception on the characteristics of the stages or the psycho-cognitive development phases of children. The famous experiments done by one of the greatest representatives of the cognitive psychology, which demonstrate, for example, the lack of the capacity for the conservation of quantity [3] are worldwide known. We were surprised to discover that,



at the question which of the stimulus objects, that in reality were absolutely equal, was bigger, some the children showed one of the two objects, either from the right side or from the left side. We realized that they did not act in the cognitive plan regardless of the role-status of the person which gave them the task. Then we asked to what extent the great J. Piaget took into account this problem or not. To raise some objections after so many years in developing one of the most influential psychological concepts [4,5] is indeed an act of great daring. And yet...we shall see what the data from our investigation shows.

Our research hypotheses were stated as follows: 1. The general hypothesis: the social and socio-affective status of the holders of some objects influence the way in which young children evaluate those objects: 1a – the evaluation manner of the sizes of some objects is strongly affected by the socio-affective status of the object owners; 1b - the evaluation manner of the sizes of some objects is influenced more by the de social status than the socio-affective status of the object owner; 1c – in the “Piaget-type” tests, the evaluation manner of some objects is strongly influenced by the socio-affective status of the object owners; 1d – in the “Piaget-type” tests, the evaluation manner of the sizes of some objects is influenced more by the social status than the socio-affective status of the object owner.

3. The Research Methodology

The basic method was the experiment. As tests, we used some of those applied in order to emphasize the phenomenon of influencing the capacity of perceptual-cognitive evaluation of children by some psychosocial factors. More accurately, we took into account two such factors: a) the social-affective status and b) the social status, respectively, the managerial status of the persons, which are presented as owners of the stimuli-objects. On the other hand, we applied some of the classic “Piaget-type” tests. We tried to apply both test categories in identical conditions for all the children, although we were aware from the beginning of the fact that, the operators being different (the students from the Master Program “Psycho-diagnosis, unifying experiential therapy and personal development”) it was hard to assume that there weren't any minor changes interfering with the experimental conditions. As it follows, we present the two tests categories.

A. Perceptual-cognitive evaluation tests created by us:

1. **The "pencils" test**, applied in three variants: a) two identical pencils (shape, color, length, thickness) were placed in the perceptual field of the subject, at a distance of 12-15 cm, and he had to answer to the question: which of the two pencils is bigger? b) two identical pencils (shape, color, thickness) but different in terms of length (the difference was 2 cm); the children was asked to tell which of the two teachers (their name) likes more (the favorite teacher – high socio-affective status); the longer pencil belongs to the less preferred teacher, and the shorter pencil belongs to the favorite teacher; the child had to answer the question which of the two pencils is bigger? c) a longer pencil (17 cm) was placed in the front of the child at a distance of 12-15 cm, which belonged, as told to the child, to the favorite teacher and another, 2 cm shorter, which belonged, as told to the child, to Mrs. Headmistress (high socio-professional status); the child had to answer the question: which of the two pencils is bigger?

2. **"Series of objects" test** applied in the same conditions like task nr. 1.

3. **The "cubes" test** is different from the previous tests by the fact that all the three variants of identical cubes are used (size, color, the material from which are made of). In variant a the child had to tell which of the two cubes is bigger. In variant b another identical cubes were presented, but of different colors and it was specified that one of the cubes belonged to the favorite teacher and, the other one, belonged to the less preferred teacher (every time the name of the teacher was specified). The child had to answer the question: which of the two cubes is bigger? In variant c another two cubes



of different colors otherwise identical were placed in front of the child, at a distance of 12-15 cm, specifying that one of them belonged to the favorite teacher, and the second belonged to the Headmistress. For this variant the child was asked to tell: which of the cubes is bigger?

B. "Piaget-type" evaluation tests:

1. **The "glasses" test**, applied in three versions: a) two glasses filled up to the same level with colored juice were placed in front of the child. The child is asked: where is more juice and the answer is recorded; b) the juice is poured from a glass into a higher and thicker glass and the child is told that the glass from which was poured belongs to the favorite teacher (X) and the higher glass belongs to the less favorite teacher (Y). The child is asked: in which glass is more juice? The answer is recorded; c) returning to the situation where the quantity of juice is equal in the two glasses. Then, in front of the child, the content of one glass is poured into another higher and thicker glass. The child is being told that the glass from which it hasn't been poured belongs to the Headmistress and the high and thick glass belongs to the favorite teacher (X). The child is asked: in which of the glasses is more juice? The answer is recorded.

2. **The "cups and pans" test** and 3. **The "clay" test**, both applied in the same conditions like task nr.

1. All the tests were applied on a group of 131 children, which were 3 to 6 years old.

4. Results and discussions

Of the 131 children (ages 3 to 6 years), 70 (53%) are boys and 61 (47%) are girls.

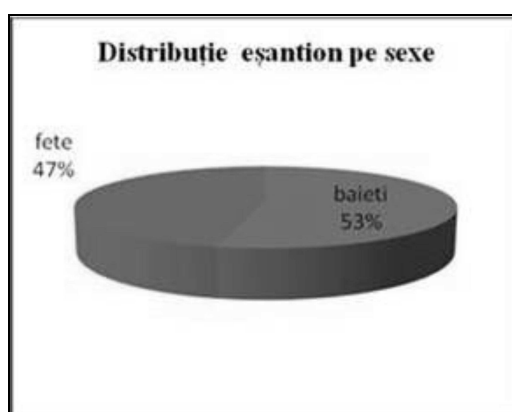


Figure 1. Sample distribution by gender

After applying the A-type variants (as an example) from every test, where the stimulus objects are identical, most children have chosen one of the left or right variant, according to our observation that they do not act on the cognitive plan regardless of the role-status of the person which offers them the task. The percentages speak for themselves for each age sample, as it can be seen in the graphs below (figures 2, 3 and 4):

-for an in the sample of 3 – 4 year-old children, 94% of the children chose left or right answer, compared to 6% rate of response preference for "equal" (Figure 2);

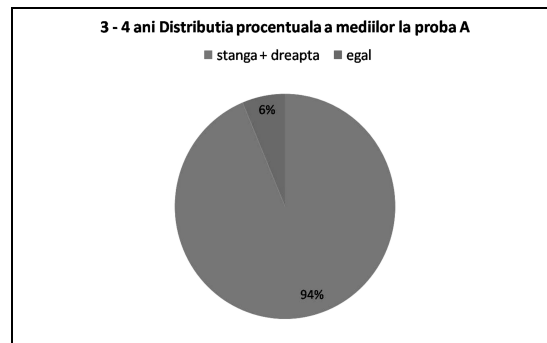


Figure 2. Results for variant A - sample of 3 – 4 year-old children

- in the sample of the 4 – 5 year-old children, 98% of the children answered “left or right” versus 2% who answered “equal” (Figure 3);

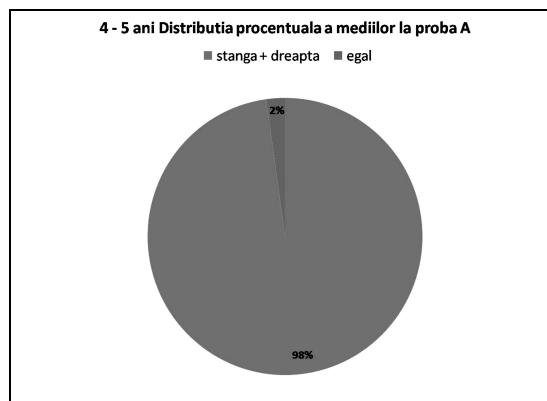


Figure 3. Results for variant A – sample of 4 -5 year-old children

- in the sample of 5 – 6 year-old children, 89% of the children answered “left or right” versus 11% who answered “equal”.

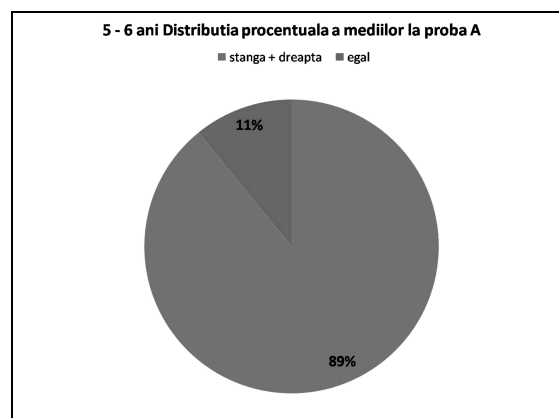


Figure 4. Results for variant A – sample of 5 – 6 year-old children



The percentages in the graphs represent the difference between the average frequencies obtained from samples. The difference between the average frequencies obtained for all variants A is significant in all samples applied, according to the paired samples t test, the level of p is less than 0.05 for all three samples of age, respectively 0,00 at variant A for 3 – 4 years, 0,00 at variant A for 4 – 5 years and 0,01 at variant A for 5 – 6 years (see Tables 1, 2 and 3).

Table 1. Paired samples t test for A-type variants – sample of 3 – 4 year-old children

Paired Samples Test				
		t	df	Sig. (2-tailed)
Pair 1	stdr - egal	54.094	6	.000

Table 2. Paired samples t test for A-type variants – sample of 4 – 5 year-old children

Paired Samples Test				
		t	df	Sig. (2-tailed)
Pair 1	stdr - egal	40.597	6	.000

Table 3. Paired samples t test for A-type variants – sample of 5 – 6 year-old children

Paired Samples Test				
		t	df	Sig. (2-tailed)
Pair 1	stdr - egal	8.738	6	.001

5. Conclusions

Following the research results, we can say with certainty that the overall research hypothesis is confirmed. Thereby, we can state that the socio-affective and social status of the owner of the objects affects the evaluation manner of young children for these objects. Also, the secondary hypotheses 1a and 1c are confirmed and, according to them, the manner of evaluation done by young children regarding the size of objects is strongly influenced by socio-emotional status of objects' owners. Furthermore, in the "Piaget-type" tests the manner of evaluation of some objects is strongly influenced by the social status of the owners of the objects, especially on the age segment of 5 – 6 years old. Research hypotheses 1b and 1d are not confirmed, hypotheses which argued that the evaluation of the size of objects is influenced more by the social status than the social-emotional status of the object owner and that the manner of evaluation of the objects' sizes is influenced more by the social status than social-emotional status of the object owner. However, the results for the two secondary hypotheses (1b and 1d) reinforce the results confirming the influence of socio-affective status on the manner of evaluation of objects and they also shade the Piaget perspective. According to Piaget's theory, at the age of 3 – 6 years the subjects of our study find themselves in the pre-operating stage. One of the acquisitions gained by this stage, according to Piaget, is conservation. By its end, the child lacking the ability to conserve quantity, for example, is easily influenced by the perceptual appearance



of the object under evaluation. The most telling example is the well-known test with glasses. Although the little one notices that the same amount of juice moves right in front of him from a glass to another, Piaget argues that all children at this age will say that the tall and thin glass will contain more juice than the short and thick one. The child cannot conserve quantity at this point. A question can be raised at this point. Our research results challenge Piaget's postulate in the light of some percentages, which shake this perspective of a strictly cognitive functioning of the young child. Therefore, we can say that there is a considerable influence of the socio - affective factor on the election and reality perception made by the young child. Moreover, we can say that cognitive development in young children is influenced by emotional factors, as in this respect, a considerable percentage of children gave the correct answer, contradicting Piaget's assumption on the inability of children in the pre-operational stage to learn conservation. We can assume from here how considerable the importance of this socio - affective factor is in the cognitive development of young children.

6. References

- [1] 1. Mitrofan, N. (2008). Psychological testing of pre-school children. School Psychology
- [2] Revue vol. I, no. 1.
- [3] 2. Mitrofan, N. (2009). New evidence regarding the phenomenon of "behavioral masking" in
- [4] small children and its implications in vol. M. Milcu, W. Griebel, R. Sassu (2009). Modern
- [5] Psychological Research: directions and perspectives of quantitative versus qualitative