

CREATIVITY DEVELOPMENT MECHANISMS AT DIFFERENT AGES

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Аннотация:

В статье рассматривается креативность в контексте психического развития человека, в первую очередь, делаются замечания об эвристической значимости данного понятия для изучения всех возрастных периодов. Исходя из общепринятого определения креативности, специфическое и гибкое поведение – это не только у взрослых, но и у известных художников и позволяет задуматься об особенностях творчества у детей.

Ключевые слова: Креативность, интеллект, логическое мышление, способности, интересы, социальная среда, гипотеза, идея, исследование.

Abstract

The article discusses creativity in the context of human mental development, first of all, comments are made about the heuristic importance of this concept for studying all age periods. Based on the generally accepted definition of creativity, specific and flexible behavior is not only in adults, but also in famous artists. and allows thinking about the characteristics of creativity in children.

Keywords: Creativity, intelligence, logical thinking, ability, interests, social environment, hypothesis, idea, research.

"Over time, I learned to draw like Michelangelo, but I will always remember learning how to draw as a child."

Pablo Picasso

Scientific research has made it possible to identify qualitative and quantitative changes in the process of developing creative abilities. Studies show that there is a general dynamic of creativity development, during development, stages of growth and stages of temporary decline of creativity have been studied. [1]

Torrenc was one of the first to show interest in this matter. He identified three sensitive periods for the development of creativity in children. The first is 5 years old, the second is 9-10 years old, and the third is 13 years old. Torrens associated the first stage of creativity development with environmental factors. At this age, the child

enters school education, and the development of creativity is explained by the influence of strict standards that exist there. The child focuses primarily on education and the influence of the rules of school life on creative expression. However, there was no empirical evidence to support this hypothesis. A plausible method would be to follow children at different ages before and after they enter school, but doing this in practice is a complex process. This line of research greatly complicates the problems of measuring creativity in young children. Consideration should be given to understanding and following instructions, creating an environment conducive to creativity. In the process of studying systems, Duffert developed a variety of thinking tests. Adapted test of creative thinking for preschool children - 42 children from 3 to 6 years old have the opportunity to measure their creative abilities. Duffert noted that the originality and fluency of thinking decreased from 3 to 5 years of age, after which a slight increase in these indicators was observed between 5 and 6 years of age. He noted that the general decrease in creativity is related to the pressure on the child from the school environment. However, due to the small number of children tested, the results will need to be replicated in further studies before final conclusions can be drawn. [2]

Another work using the cutting method was conducted by Urban. It gives several possible answers to the question of the influence of the school environment on the creativity of young children. Urban measured the visual creativity of 272 children between the ages of 4 and 8. In this technique, the test subject creates drawings based on six simple elements (dot, semicircle, open square, etc.), five of which are inside a frame. The general indicator of creativity summarizes many predictors - the relationship between elements, the use of these elements. Using this style assessment method, Urban found an average increase to 4-5 years of age and a decline in creativity at 6 years of age. After 6 years, the creativity index went up again. To determine the effect of the school environment on the temporary decline in creativity, Urban compared the average scores of six-year-old children in kindergarten and elementary school. According to the results, the indicators of children in kindergarten are significantly higher than those of school children - almost twice as much. A precise analysis of the calculations for each variable shows that some of them are growing steadily with age. In particular, older children use more elements and try to create a composition that combines different elements. 80 percent of four- and five-year-olds could not draw a picture on the subject without deviating from it. Perhaps this method is not fully adapted to young children, which reduces its value in terms of general conclusions about the influence of the school environment on creativity.

According to Torrens, the second period of decline in creativity is 9-10 years old, which corresponds to the fourth grade of school. 100 children participated in the experiment and every year for three years they were evaluated using the designed test. To compare performance in different age groups, test scores were standardized based on the results

obtained in the fifth grade. Children in fourth grade showed significant declines in all measures of divergent thinking. From third to fourth grade, 41 percent to 61 percent of children showed a decline, while only 11 percent to 38 percent of children increased during that period. In contrast, from fourth to fifth grade, their scores ranged from 33 percent to 59 percent. Torrenc offers an explanation based on the influence of the social environment. According to him, the decline of creativity is related to the desire of children to follow school rules, which results in a conscious loss of consciousness.

[3]

Lubart and Lutry decided to test the hypothesis of the influence of the environment on the decline of creativity by Torrens at the age of 9-10 and gave an alternative explanation for this phenomenon. According to them, the decline in creativity observed in many countries can be related to the emergence of the ability to think logically at this age. In fact, post-artistic researchers of class and serialization operations defended Piaget's idea that the process of successful solving of his problems by children aged 7-8 is based on empirical decision-making processes. Successful decisions based on tasks and logical thinking will appear only in 9-10 years. Thus, the decline in creativity observed at the age of 9-10 may paradoxically be associated with the emergence of new abilities for logical thinking.

The first goal of the study by Lubart and Lutry was to test whether there is a temporary decline in creativity between the ages of 9 and 10. The result showed that 8-9-year-olds (third grade) had higher creativity scores than 9-10-year-olds (fourth grade) and a new increase in scores was observed at 10-11 years. We studied the same children of different ages to exclude the interpretation of the results by the specificity of the compared samples. The second goal of the experiment was to test the hypothesis that a decrease in creativity leads to the emergence of new abilities for logical thinking.

related to.[4]

The sample consisted of 57 subjects of 8-9 years and 32 subjects of 9-10 years. The same children were tested twice a year. 8-9 year olds turned 9-10 years old; comparing their performance at two years of age should answer the question of whether there is a decline in creativity during this period. Comparing the performance of 9-10-year-old children and 10-11-year-old children should answer the question of whether creativity can grow during this period. To obtain indicators of creativity, we used the verbal part of the test for creative thinking of Torrens. (Torrance, 1976)

A decrease in creativity was observed in 9-10-year-old children when performing some logical thinking tasks. In solving both problems, age cross-sections and longitudinal comparisons were achieved: a new use of a cardboard box. In contrast, there was no decline in the performance of the tasks of asking questions about the picture, finding the continuation of the scene, improving the toys, and making up the story. Grade-to-grade growth was achieved for these tasks. Individual development lines are constructed for children aged 8-9 to 9-10 years and for children aged 9-10 to 10-11

years. Three groups of children were identified: with a decrease of at least 20% of flexibility compared to the initial level, with relatively stable indicators of flexibility, an increase in flexibility of 20% and above. A decrease was observed in 60% of subjects tested from 8-9 to 9-10 years old, and only 40% of subjects tested at 9-10 and 10-11 years old. If the subject experienced a decrease in performance on the cardboard box problem, then there was no decrease on the cloud rope problem. As for logical thinking and mind control methods, the performance of tests to identify sequences of vocabulary and pictures has been constantly improved. During the transition from 8–9 years to 9–10 years, a significant improvement was observed in the results of logical classification and similarity tasks; From 9–10 to 10–11 years, this improvement was less apparent.[5]

Thus, on the materials of some tasks, with a decrease in the average indicators of divergent thinking, an increase in the average indicators of logical thinking is observed. These results confirm Rieben's hypothesis that there is a relationship between creative development and logical thinking. Further analysis showed that subjects with the greatest gains in logical reasoning did not experience a sharp decline in creativity.

This research suggests that the relationship between logical thinking and creativity is more complex. In particular, the type of task given to the child has a significant impact on whether or not a decrease in creativity is achieved, which calls into question the idea of creativity as a single concept. We can offer the following explanation about the effect of the type of tasks on the decrease of creativity. At the age of 9, children are in the stage of development of logical thinking, they gradually master new knowledge tools - for example, the ability to mnemonically organize associations between ideas, for example, by combining associations into categories. These new tools may not always be effective and may not always be easy to use, as they depend on the characteristics of the child's prior knowledge in each area.

Therefore, when a 9-year-old child receives a task, he can choose two processes of searching for an idea: on the one hand, a well-known and widespread process based on free associations, and on the other hand, a new process, more structured, but characterized by limited efficiency. This hypothesis suggests that the child's choice of one of the two ways to search for thoughts is based on prior knowledge of the stimuli used in the reasoning tasks of distinguishing thoughts. The most familiar objects, such as a cardboard box or ropes, become stimuli more suitable for structured search than unusual objects, such as a new toy or a picture of a landscape. As a result, reduced creativity in tasks with a cardboard box and a rope tied to clouds was temporarily less effective.

explained by choosing a structured search strategy.[6]

A temporary decrease in creativity can be explained differently. For example, Runco and Charles hypothesized that this decline is related to the development of the ability

to judge the relevance and originality of ideas. By age 9, some children adhere as much as possible to the norms, rules, and conventions of "reality" in various areas of their lives. The development of the ability to evaluate, together with "attention to reality", can serve as an alternative to the decline of creativity in 9 years.

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