

## The Effect of Creative Performance Activity on the Innovation and Creativeness of Children

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**Abstract:** The aim of this study was to investigate the effect of some activities related to creativity of children. The population of this study consisted of Alborz center for intellectual development of children and adolescent. Fifty children (25 for experimental group and 25 for control group) were selected and classified into two experimental and control groups. Torrance creativity test was the instrument for collecting data. Considering the low age of participants, the number of questions and level of the test were lowered so as to be more understandable for children. In order to analyze the finding, an independent t test was taken. The difference between the mean score of creativity in experimental and control was significant for the main hypothesis and the first two sub-hypothesis but the difference was not significant for the third sub-hypothesis. The result of this study showed that the activities of creative show influence children's creativity.

**Keywords:** Creativity, Innovation, Children, Adolescent

### Introduction

Creativity is the God's gift for human and it is in all human beings innately but its emergence and development need suitable environment. According to Torrance (1993) the following items are essential for practical subconscious process of brain to make the creativity: a. willing to risk, b. being aware of our emotions, c. to know ourselves separate from others, d. thinking about other person's beliefs and being sure about our comprehensions, and e. mutual communication with others and making balance in social relations and its incorrect and unpleasant reflections.

Vangundy (1987) has identified the effective and significant reasons of creative environment in three classifications: a. external environment, b. internal environment of group members, and c. the quality of personal relationships among members. The creative and innovative person should be in the suitable environment to express his or her creative thought. The emergence of creative thought is impossible by means of reinforcement and pressure.

It is clear that to achieve the creative thoughts, it is necessary to make negative agents weaker and empower the positive agents. Creativity is dependent on social environment and it will be emerged in social – cultural fields. Family, educational centers, organizations and costumes of each society, make these suitable fields. These fields can have positive or negative effects on creativity. The roles of family and school are very important due to development and self confidant. Research shows that some of these agents are able to weaken the creativity in long time or destroy it totally.

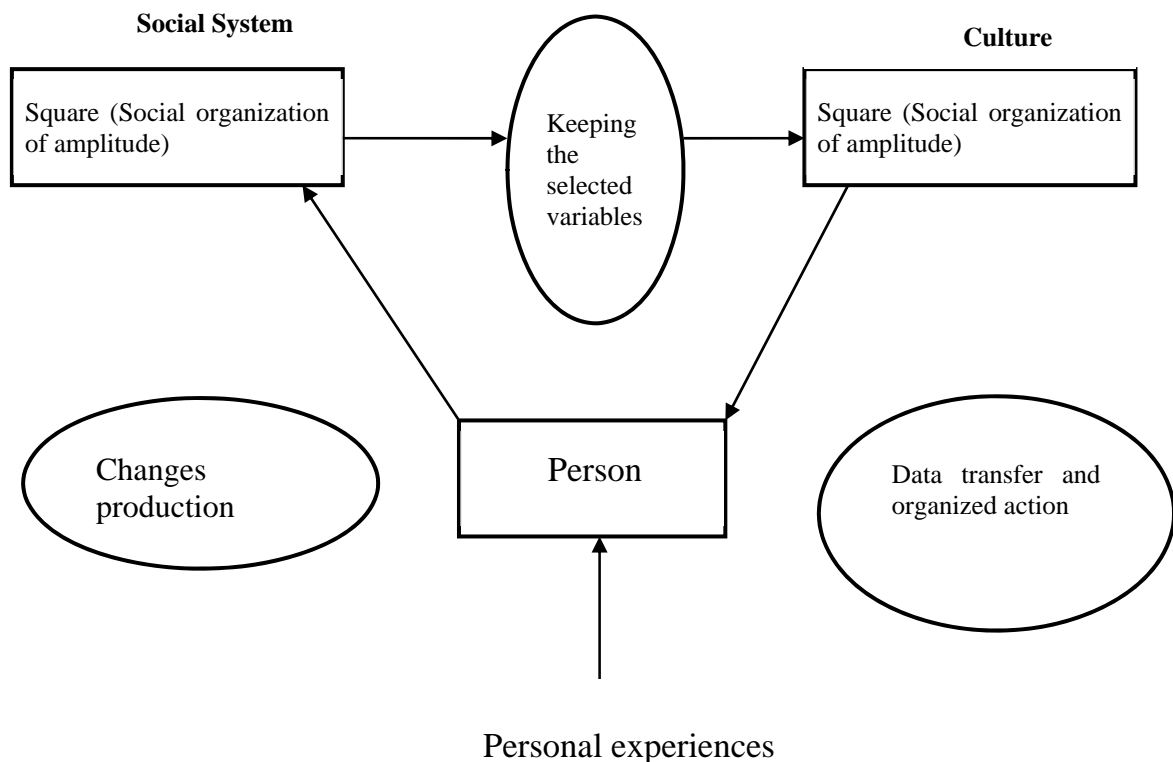
When a child or teenager tries to think creatively and is not supported mentally, emotionally, and socially his or her personality will be menaced. Creativeness as an identified agent act frequently and is always used in daily life, industry, art, literature, sciences and in many other fields and it is developed since childhood and even before birth. Today creativeness is known as a developmental and acquisitive activity as oppose to what was identified in the past as innate thing. Therefore, we can say that some activities such as storytelling, playing with mud and making wooden patterns are important for the creativeness of children and are effective.

Research about creativity and its elements have started by scientists of social sciences particularly by Gilford in 1950s. According to Gilford (1950) the process of creativeness is in the range of intellectual activities. Gilford studied the method of human's thoughts in his explanation of intellectual construction and he has divided thoughts into two groups of convergent and divergent. Gilford introduces the divergent thought as one of the elements of creativeness which has four features: flexibility, origin, versatility and the expansive agent. We can be effective in the development of children's creativeness by using the suitable methods and contents. The communication with book alone cannot be the helpful in making the creative thoughts. Children need a suitable environment and a suitable condition to be able to have creative thoughts. Although the children and teenagers association is one the important organs in developing thoughts, creativity, artistic and literary activities but different cultures play different roles. Among all of these activities the creative performance or theater is one of the main and related activities in the development of creativeness. Instructor is one of the important or the most

important agent which can help the growth and development of creativity and creative thoughts.

The elements of creativity are generalized as cognitive, affective, personal and emotional and social or environmental. According to Amobile (1989) the elements of creativity are interconnected: each is cause by and causes the other. Adams (2005) points out that creativity is a function of the will. He explains that “an explicit decision to be creative, along with a meta-cognitive awareness of the creative process” can do much to enhance “long-term creative results.” For Adams motivation is essential to creativity and the creative person is motivated with a passion for his or her field. Some personal aspects of creativity lie in the area of innate talent rather than acquired ability, as with gifted artists, poets, and inventors. Other aspects can be refined or generated through education, for example a preference for building new concepts when confronted with novel experiences rather than trying always to make new ideas fit old theories (Iowa State University, 2015).

Diagram below shows that the internal relations of three systems are correlated event of one thought, topic and creative action and the performance of all three systems for emergence of creativity is essential. In general, emotional, cognitive, and primary experiences are key topics and they are practical for examining the human's creative treatment.



According to the diagram above, a person who is under personal experiences makes some changes and then imports these changes to the social square, some of these changes which are harmonic with cultural amplitude will be kept and imported to the amplitude of culture, and this cycle will continue. Therefore, creativity is not the result of personal action. The purposes of this study is to compare two groups of participants in the creative performance class and astronomy class based on their verbal skill, life skill, and problem solving skill. The main hypothesis is that there is a significant difference between the students of both classes. Second, third, and fourth hypothesis are that there is a difference between these two classes is verbal skill, life skill, and problem solving skill.

**Methodology**

In this research, there are two groups and there are 25 participants in each group. Experimental group is a group which members are enrolled in the creative performance or theater class and control group is the other one which its member were selected from astronomy class. The population of this study is in Alborz center in Karaj for intellectual development of children and adolescent. The age of participants is between 5 to 12.

The independent variable in this research is the action of creative performance which we want to measure its effect on the dependent variable or creativity. Group's creativity is measured by Torrance questionnaire. Building on Guilford's work and created by Torrance, the Torrance Tests of Creative Thinking (TTCT), a test of

creativity, originally involved simple tests of divergent thinking and other problem solving skills, which were scored on four scales: fluency, flexibility, originality and elaboration. This questionnaire includes 60 questions but is modified to match the participant age. Selected questions were divided into the three features (problem solving skill, verbal or speech skill and daily problem solving skill).

In this research Alfa is between zero and one  $0 \leq \alpha \leq 1$ . If  $\alpha = 1$  there is a complete reliability and if  $\alpha = 0$  there is not any reliability at all. Based on 20 questionnaires which were used as pretests  $\alpha$  for this questionnaire is 0.709.

**Table 1**

Variable	Alfa Coronbak	Standardized Alfa Coronbak	Statement Numbers
Torens Creativity	0.709	0.702	20

**Data Description**

In this part we attempted to express the advantageous information of the statistical sample about the aspects of creativity of two groups.

**Table 2**

Variable	Group	Frequency	Average	SD	Minimum	Maximum	Highest Available Score
Age	Control	25	8.83	1.7	6	12	
	Experimental	26	8.6	2.26	6	12	
Verbal Skill	Control	25	13.41	2.44	8	17	
	Experimental	26	14.92	2.48	8	18	
Life Skill	Control	25	18.2	2.73	13	23	
	Experimental	26	19.88	1.7	16	23	
Problem Solving Skill	Control	25	14.07	2.33	8	18	
	Experimental	26	14.77	1.84	10	18	

The averages of both group's age are close to each other and they are approximately 8. According to the Table 2, the average for experimental group in solving problem skill is 14.77 and in control group is 14.07, the average for the life skill in experimental group is 19.88 and in control group is 18.2 and the average for speech skill for experimental group is 14.92 and for control group is 13.41. The average score of experimental group is higher than control group in all aspects of creativity.

**Table 3**

Variable	Group	Frequency	Average	SD	Min	Max
Creativity	Control	25	45.66	6.11	31	55
	Experimental	26	49.58	3.93	38	56

The highest available score is 100. According to the Table 3, the average score of creativity for experimental group is 49.58 and for control group is 45.66. Based on the achieved data, it is possible to say that the average score of experimental group is higher than for control group in creativity.

**Main Hypothesis**

**First Hypothesis**

There is a meaningful difference between the students of both classes.

**Table 4**  
**Comparing the Creativity of Both Classes**

Group	Creative Performance		Astronomy		Meaningful Level	T
	SD	Average	SD	Average		
Total Score of Creativity	3.39	49.58	6.02	45.8	0.01	-2.67

As can be seen from Table 4, there is a meaningful difference between the participants of both classes at 0.01 levels. Therefore, with 99% certainty we can say that these groups are different in creativity and the main hypothesis of research is confirmed.

**Subordinate Hypothesis**

**Second Hypothesis**

There is a clear difference between these groups in verbal skill.

**Table 5**  
**Comparing the Creativity of both Classes in Verbal Skill**

Group	Creative Performance		Astronomy		Meaningful Level	T
	SD	Average	SD	Average		
Verbal Skill	2.48	14.92	2.4	13.44	0.035	-2.17

According to Table 5, there is a meaningful difference between the participants of both classes and second hypothesis is confirmed too.

**Third Hypothesis**

There is a meaningful difference between the members of creative performance class and astronomy class in life skill.

**Table 6**  
**Comparing the Creativity of Both Classes in Life Skill**

Group	Creative Performance		Astronomy		Meaningful Level	T
	SD	Average	SD	Average		
Life Skill	1.7	19.88	2.7	18.28	0.016	-2.53

According to Table 6, there is a meaningful difference in life skill among the participants of both classes and we can say that the third hypothesis is confirmed. Creative performance class has a better life skill.

**Forth Hypothesis**

There is a meaningful difference between the children of both groups in problem solving skill.

**Table 7**  
**Comparing the Creativity of Both Classes in Problem Solving Skill**

Group	Creative Performance		Astronomy		Meanin gful Level	T
	SD	Average	SD	Average		
Problem Solving Skill	1.84	14.77	2.29	14.08	0.243	-1.182

According to Table 7, there is not any meaningful difference between the participants of both groups in problem solving skill. Therefore, the fourth hypothesis is not confirmed.

**Discussion and Conclusion**

Creativity is a concept which its definition has changed many times and different researchers have defined it differently although some have identical definition. According to Fisher (2005), creativity has been regarded as a special attribute. He states that researchers have related this quality to one or more of four aspects of creativity: 1. the idea or product created, 2. the process of creativity, 3. the person of creator, and 4. the creative environment. Fisher argues that creativity is something that creative persons make creative products by having original or appropriate creative idea. Creativity is process of producing the exclusive production by means of the existent production. This production only should be new and exclusive for creator concretely or abstractly. Sharp (2004) argues that creativity is an important human characteristic. She states that creativity is “perhaps best thought as a process, requiring a mixture of ingredients, including personality traits, abilities and skills” She suggests that in the early years staff should help children “to develop their creativity by providing a creative environment, helping children to build up their skills through play, behaving creatively themselves and praising children’s creative efforts.” Creativity is significant and should be encouraged.

Today world is complex and is facing a major turning point in how its many societies, ethnic traditions, ideological viewpoints and philosophical and religious beliefs are reaching to the continued rapid advancement of creativity and technological change. There is a close relation between the type of culture and people's ability to make creative thoughts. There are not any individual in any society which do not have the ability to be creative but there are cultures, political and social barriers. Also, the human's civilization is a production of creativity. Creativity is one of the human's main and basic features.

Creativity is one of main purposes of education. As Piaget (1972) points out the principal goal of education is to create men who are capable of doing new things. The second goal of education, according to him, is to form minds which can be critical, can verify, not accept everything they are offered. The process and existence of creativity is limited in the Iranian educational system as well as in cultural and social level due to the cultural and social barriers.

The center for children and teenage development in Iran is one of the main association which works with children, and because the members of this association are significant for making the future, this research is important and noticeable. Finding of this research can be helpful for instructors, teachers and parents and the results can be valuable for developing of creative performance class.

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