

# Investigation of the Effectiveness of Children's Educational Model Based On the Criteria of Creativity in Preschool Children, a Clinical Trial.

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## ABSTRACT

**Introduction:** *the beginning years of life from the point of view of education, is considered the influence periods, it is noteworthy training. This study examines the effectiveness of children's educational model based on the criteria of creativity in preschool children. Methods:* In a clinical trial in a quasi-experimental design, 60 children with 6-5 years old in preschools were selected through multi-stage cluster sampling and were analyzed through Excel office software and randomly assigned to experimental and control groups. Child-centered teaching model to the experimental group were presented in 12 sessions and the control group was put on a waiting list. Data was collected in the form of clinical interview, demographic questionnaire (response rate: 93%) and creativity scale Selye's (response rate: 95%) and Chi-square test and analysis of covariance was analyzed. **Results:** The results Showed that children's educational model based on the components of creativity in children has played a significant effectiveness ( $p < 0.05$ ). **Conclusion:** The findings of this study could also contain educational implications on the prospects for prevention and treatment of childhood disorders should be considered.

**Keywords:** *creativity, preschool children, child-centered education*

## Introduction

Creativity is considered a new concept in today's psychology that has attracted wide attention to itself. Guilford (1967) believes that creativity can be dynamic through stimulation. He believes that the dynamic must occur in all elements of creativity; these elements consist of divergent, convergent and component evaluation components of creativity. Torrance (1974) also believes that the promotion and strengthening of mental and physical survival of creative code needs to include mental abilities, capabilities and abilities motivational skills. View of Amabili (1987) focus on the promotion of mental abilities, motivation and skills on creativity. Sternberg (1988) also

believes that strengthening of creativity is effective on 5 factors of personality, intelligence, intellectual style, which is effective motivational and social. Yang believes that creativity is a form of mental efficiency. Therefore, it can strengthen the mind and improve inefficient adjustment. This generation happens due to the flexible schemas mind and strengthens. In recent years psychologists have tried to devise tests to measure their creativity. These tests are often at odds with the traditional test framework and accountability is not limited to interfere with an index of intelligence. Test subjects should be based on creativity and without a mental picture that your thoughts control reasonably pays to invent things. With regard to the proposed principles of this research is to evaluate the effectiveness of children's educational model based on the criteria of creativity in children. .

## Methods

In this study, given the nature and objectives of the research of quasi-experimental design with pretest - posttest control group and random selection of subjects were used as independent variables include interventions based educational model of child-centered and dependent variable scores Selye's was the creativity of the participants in the questionnaire. 60 children with 6-5 year-old in preschool through multi-stage cluster sampling were selected And Excel office software and randomly assigned to experimental and control groups were assigned. Child-centered educational model in the form of 12 training sessions were provided to the experimental group and the control group was put on a waiting list. Data in the form of clinical interview, demographic questionnaire and scale creativity Selye's was collected and Chi-square test and analysis of covariance was analyzed.

## Instruments

In this study, structured clinical interview, research made demographic questionnaire, and Selye creativity scale were used.

**Structured Clinical Interview (SCID):** it is a clinical interview used for diagnosis of Axis I disorders based on DSM-IV. Inter-rater reliability coefficient for SCID have been reported equal to 60% (First et al, 2002). This diagnostic agreement in Farsi for most specific diagnosis is generally favorable with higher reliability than 60%, Kappa coefficients for the current detection and lifetime diagnoses is obtained equal to 0.52 and 0.55, respectively (Sharifi et al, 2009).

**Demographic questionnaire:** this questionnaire was prepared and used by the researcher to collect personal information such as age, education, marital status, occupation and duration of drug use.

**Creativity Test of Jean - Louis Selye's:** This test made in the seventies by Jean-Louis Selye's in France. This tool is a functional test that fluidity, expansion, flexibility and originality can be measured by it and in total an overall score for creativity can be calculated. This test consists of three sections: verbal fluency, completion or

expansion of video images, image interpretation or flexibility (Guklan and Guklan, 1975).

**Results**

In this study, the descriptive analysis and inferential analysis was done and then descriptive analyze was done. In the data description section, the mean and standard deviation and in the inference section given the scale of the studied variable, the multivariate analysis of covariance was used. Before it, relevant test assumptions including default of homogeneity of variances within the group was considered through Levin, as well as normal distribution of data was assessed by Shapiro-Wilk test.

**Reviewing normal distribution of scores**

Shapiro-Wilk test results in examining the assumption of normal distribution of scores is presented in Table 1.

Table 1: Results of Shapiro-Wilk test

Significance level	Shapiro-Wilk	Group	Variable
0.239	0.919	Experiment	Parent-child
0.225	0.224	Control	

According to the results in Table 2, the results of Shapiro-Wilk test indicate no significant difference between the score distribution of parent-child, hence the assumption of normal distribution of variables is established. The assumption of equality of variances in the two groups is established based on the results of Leuven (F=0.432, P>0.05), hence the use of ANCOVA is permitted. In Table 2, the

results of analysis of covariance to assess the effect of education on creativity variables are presented.

**Analysis of covariance test**

To investigate the effect of an educational intervention, ANCOVA was used. The results of this test are presented in Table 2.

Table 2: Results of multivariate covariance analysis of the variables triple creativity

Chi Eta	Significance level	F	Mean Square	Degrees of freedom	Sum of squares	Index	Effects
0.367	0.000	16.22	572.03	1	572.03	Verbal fluency	
0.006	0.000	183	8.8	1	8.8	Pictures Completion	Group
0.417	0.000	19.98	918.533	1	918.533	Pictures interpretation	
-	-	-	35.25	28	98.16	Verbal fluency	
-	-	-	43.85	28	86.12	Pictures Completion	Error
-	-	-	-	28	76.12	Pictures interpretation	
-	-	-	-	30	0.16	Verbal fluency	
-	-	-	-	30	75.16	Pictures Completion	Total
-	-	-	-	30	0.97	Pictures interpretation	

According to the findings in Table 2, the effectiveness of educational interventions on three indicators of verbal fluency, picture completion, picture interpretation is significant (P<0.00).

**Discussion and conclusion**

This study was conducted aimed to evaluate the effectiveness of interventions based on child-centered education model on the creativity index. The results showed that, by considering pre-test scores as a covariate (auxiliary) variable, children's educational model based on the components of creativity in children has played a significant

effectiveness. The findings of this study are consistent with management backgrounds. According to Guilford, creativity is a process of divergent thinking and if parents of children within educational drying and flexible enclosure and the child have to be to such bigger and think, another opportunity to establish creative thinking and spontaneous Does not remain. If all human beings are alike in terms of Michel Foucault think, do not think any of them in fact. The results of this study showed that in order to make creative and divergent thinking, the first step in the learning environment is changing expectations. In other words, you need to learn when provided in the curriculum experiences also vary. The second step is to enhance creative thinking, eliminate stereotypical thoughts in children. In order to be flexible and nurturing classroom environments thinking of strengthening and adequate equipment. Torrance (1974) in their study that found that the characteristics of the players and features and educational practices can lead to an increase in creative thinking. Instructors who teach the child-centered teaching methods are used,

Children are sensitive to the stimuli and the views, opinions and made by children respect. They are encouraged and the emphasis on avoiding stereotypical patterns and modal class to organize the diverse and creative environment to be created. As a result of using this method, an increase in growth and creativity in children. The limitations of the study is the difficulty in understanding the interaction and management policy, the lack of standardization forms of creativity scale Selye and restrictions mentioned in the population. It is recommended that future studies broader society and different age range to be considered so that by the power of the test was higher in the results statement.

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### Conflict of Interests

The author declared no conflict of interests.

### References

- Amabile.T and Hennessey.A (1987) Creativity and learning.N.E.A .National Education Association .washington DC.
- First, M. B., Spitzer, R. L., Gibbon, M., & Williams, J. B. (1997). *User's guide for the Structured clinical interview for DSM-IV axis I disorders SCID-I: clinician version*. American Psychiatric Pub.
- Guilford. j.p(1967) the nature of human intelligence. Mcgrahill. New York.
- Sharifi, V., Assadi, S. M., Mohammadi, M. R., Amini, H., Kaviani, H., Semnani, Y., ... & Seddigh, A. (2009). A persian translation of the structured clinical interview for diagnostic and statistical manual of mental disorders: psychometric properties. *Comprehensive psychiatry*, 50(1), 86-91.
- Sternberg. R. A(1988) three facet mode of creativity. The nature of creativity. Cambridge uni press.
- Torrance. E.P(1974) norms technical manual Torrance test of creative thinking Personnel press.