

## EFFECT OF SCHOOL AND HOME ENVIRONMENTS ON CREATIVITY OF CHILDREN

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*In the present study an attempt has been made to find out the effect of school and home environments on creativity of children. A sample of 200 ninth class adolescents students from 100 government and 100 private schools was drawn from Chandigarh city of India. The study revealed that government school students of Chandigarh city have higher creativity except in elaboration as compared to private school students. The mean scores also show that the girls as compared to boys have higher level of creativity. The significant t-values show that the creative stimulation, cognitive environment dimensions, permissiveness dimensions of school environment effects the creativity of school children to a certain extent. There also exists a significant difference between children of rich and poor home environments on all the dimensions of creativity.*

**KEYWORDS:** School Environment, Home Environment, Creativity.

### INTRODUCTION

Since the last three decades 'creativity' has been a major field of interest among psychologists as well as educationists. Different scholars have defined creativity. The etymological root of the word creativity is in the Latin word 'creatus', meaning to have grown. Creativity is understood as a process, which produces something new as well as useful. The New Encyclopaedia Britannica (2002) defines creativity as, 'the ability to make or otherwise brings into existence something new, whether a new solution to problem, a new method or device or a new artistic object or form.' Creativity is a process continuously shaped and stimulated (or constrained) by human, social, cultural and institutional factors.

The School environment can have a dramatic impact on how students learn. It can affect mood, motivation, creativity and productivity of students-positively or negatively. Creativity is a mental and social process involving the generation of new ideas or concepts, or new associations of the creative mind between existing ideas or concepts. The process of either conscious or unconscious insight fuels creativity. An alternative conception of creativity is that it is simply the act of making something new. Good education proper care and provision of opportunities for creative expression inspire, stimulate and sharpen creative minds. Creativity encourages and demands complete freedom to accept and express the varied responses. A positive environment

or situation that is open, democratic and free may be said to contribute positively to the development of creative potential. On the other hand, a closed society, culture or situation may act as a strong deterrent to the development of initiative within the individual.

A school's environment is the thread that connects the multitude of activities on a campus. In many respects this thread is almost invisible, yet everyone experiences its influence. A school's physical environment includes the school building and the surrounding environs such as noise, temperature, and lighting as well as physical, biological, or chemical agents. The psychosocial school environment encompasses the attitudes, feelings, and values of students and staff. Physical and psychological safety, positive interpersonal relationships, recognition of the needs and success of the individual, and support for learning are all part of the psychosocial environment. Other factors that can affect a school's environment include: the economy; social, cultural, and religious influences; geography; socioeconomic status of students' families and legal, political, and social institutions.

Home environment refers to all sorts of moral and ethical values and emotional, social and intellectual climate set up by the family members to contribute to the wholesome development of an individual. Family with its physical, intellectual and emotional aspects shapes a child's life in his journey towards self-fulfilment. Individual differences owe their origin mostly to a number of variables created by home, which may hinder or help the progressive growth of the child. Tizard & Hughes (1984) found home as a powerful learning environment for a child with their presentation of concept such as: the encouragement of incidental learning as a natural reaction to their environment, individualized attention from adults and the close relationship between parent and child as an important factor in learning experiences. In her book, *Growing up Creative*, Amabile (1989) observes that there are several ways that parents can kill creativity in their children. She stresses the importance of the climate created and that coercion and pushing children into activities before they are ready can be detrimental to the child's creative growth.

#### **EMERGENCE OF THE RESEARCH PROBLEM**

Very often we experience groups of children unmotivated, uninterested and underperforming. All this is a result of lack of motivation and creativity in learning process. School and home environment have a decisive role to play in inducing creativity in the students. It is necessary to understand and identify the incubators of creativity and the degree of their effectiveness in the overall mechanism of school and home. School education and home environment are the most determinant factors in shaping lives and careers of students. Bringing fundamental changes in the creativity and motivation of children

can impact our society and nation in a significant way. The magnitude of impact of this study's findings is going to be voluminous. Thus, it has inspired the investigator to explore this field.

#### **REVIEW OF RELATED STUDIES**

Morrison (1966) reported significant relationship between teacher's classroom influence and academic achievement of students. He concluded that student spend a great deal of time with school teachers which plays an important role in their development.

Jarial (1981) found that non-verbal and verbal creativity were positively and significantly related to academic achievement in science.

Young et al., (1994) studied the impact of school on the achievement level of students and found that children learn through exploration of their environments, in particular the home and school, as important developmental factors.

Panda (1997) in his study, "Impact of creativity and adjustment on academic achievement", found positive and significant correlations between academic achievement and creativity.

Bajwa (1998) found positive significant correlation between creativity and academic achievement in physics.

Goel (2004) instigated the effect of home environment on educational aspirations. The sample of the study comprised 100 students (50 boys and 50 girls) of intermediate classes in age groups of 16-20 years. The results revealed that girls had much higher educational aspiration than boys. Boys felt more rejected with the autocratic atmosphere at home in comparison to girls who experienced more nurturance than boys.

Pande & Nanda (2005) conducted a study to find the impact of different environment of nursery school on the school readiness of children. The sample comprised of 60 children attending different level of quality of nursery school education in terms of school environment (good/average/poor). The children were taken randomly from 12 nursery schools of Ludhiana district in Punjab. Results revealed that good school environment improved the level of school readiness of children.

Narula (2007) in her study on a sample of 700 students of ninth class studying in senior secondary schools of Punjab concluded significant positive correlation between the variables of creativity and academic achievement. Significant difference was also obtained between the creativity of boys and girls at 0.01 level of significance.

Neelam (2008) in her study on 630 students of eleventh class studying in higher secondary schools of Jammu division concluded that positive

significant correlations exist between home environment and emotional competency of students.

Jagpreet et al., (2009) in their study found that there exists a positive significant relationship of self-concept with protectiveness, conformity, reward and nurturance components of home environment.

Since very little work has been done in this field, therefore the researcher has undertaken the present study.

#### **SIGNIFICANCE OF THE STUDY**

A very few studies have been conducted in the field of school and home environment and its impact on creativity and its development. The present study explores their relationship and will help the school administrators in framing educational objectives, teaching strategies, administrative practices and improve the physical environment. The study will be helpful to know how much importance and emphasis is being given to develop favourable conditions for developing creative potential of students. The study also explores the aspects and attributes of home environment that could aid in creative development as well as factors that could inhibit this development. It will also help the Chandigarh Administration and its Education Department to take steps and introduce more programmes in the light of the findings of the present study to ensure the maximization of creativity among school children.

#### **OBJECTIVES OF THE STUDY**

Following are the objectives of the study:

1. To find the creativity level of government and private secondary school children.
2. To find the creativity level of boys and girls.
3. To find the difference in the creativity of children due to creative stimulation dimension, cognitive dimension and permissive dimension of school environment.
4. To find the creativity level of children with rich and poor home environment.

#### **HYPOTHESES**

1. There will be significant difference in the creativity of children of government and private school students.
2. There will be significant difference in the creativity of boys and girls.
3. There will be significant differences in the creativity of children due to creative stimulation dimension.
4. There will be significant difference in the creativity of children due to

cognitive dimension of school environment.

5. There will be significant differences in the creativity of children due to permissiveness in school environment.
6. There will be significant differences in creativity of children with rich and poor home environment.

#### **SAMPLE**

The present study was conducted on a random sample of 200 ninth class students of Chandigarh. The sample comprised of 100 government school students (50 boys and 50 girls) and 100 private school students (50 boys and 50 girls).

#### **TOOLS USED**

The following tools have been used in this study

1. Non-Verbal Test of Creative Thinking (Mehdi, 1985)
2. School Environment Inventory (Mishra, 1984)
3. Home Environment Inventory (Mishra 1989)

#### **DESCRIPTION OF TOOLS**

1. Non Verbal Test of Creative Thinking (Mehdi, 1985) measures the individual's ability to deal with figural content in a creative manner. Three types of activity are used for this purpose, viz., picture construction (10 minutes), picture completion (15 minutes), and triangles and ellipses (10 minutes). The reliability score and also the total creativity score are considerably high, ranging from 0.93 to 0.94.
2. School Environment Inventory (Mishra, 1984) is an instrument designed to measure the psychosocial climate of the schools perceived by the pupils. It contains 70 items related to six dimensions of school environment. The split-half reliability for various dimensions of school environment i.e. Creative Stimulation, Cognitive Encouragement, Acceptance, Permissiveness, Rejection and Control are 0.91, 0.79, 0.82, 0.67, 0.78 and 0.76 respectively.
3. Home Environment Inventory (Mishra, 1989) is an instrument designed to measure the psychosocial climate of home as perceived by children. It provides a measure of the quality and quantity of the cognitive, emotional and social support that has been available to the child within the home. The inventory has 100 items belonging to ten dimensions of home environment. Split-half reliability was worked out separately for

all ten dimensions, which were reported to be between 0.67 and 0.86 respectively.

## DATA ANALYSIS AND RESULTS

**Table 1**

**Mean Difference in Creativity of Government and Private School Students.**

Creativity	M <sub>1</sub>	SD <sub>1</sub>	M <sub>2</sub>	SD <sub>2</sub>	t	Level of Significance
	Govt.		Private			
Originality (V)	12.70	7.24	9.67	8.06	2.78	Significant at 0.01 level
Originality (NV)	10.47	6.48	2.65	4.48	9.80	Significant at 0.01 level
Elaboration (V)	31.11	14.98	30.92	15.98	0.08	Not Significant
Elaboration (NV)	11.16	7.51	4.63	7.46	6.10	Significant at 0.01 level
C-Total	65.44	21.31	46.70	24.24	5.40	Significant at 0.01 level

\* V=Verbal, NV= Non Verbal

The t-values with regard to originality (V), Originality (NV), Elaboration (NV) and C-total were significant at 0.01 level of significance, while the t-value with regard to Elaboration (V) was not significant. On the basis of above results, it can be concluded that the government school students of Chandigarh have higher creativity except in Elaboration (V) as compared to private school students. Thus hypothesis 1 is accepted.

**Table 2**

**Mean Difference in Creativity of Boys and Girls.**

Creativity	M <sub>1</sub>	SD <sub>1</sub>	M <sub>2</sub>	SD <sub>2</sub>	t	Level of Significance
	Boys		Girls			
Originality (V)	10.83	8.11	11.56	7.47	0.66	Not Significant
Originality (NV)	6.73	7.10	6.43	6.51	0.30	Not Significant
Elaboration (V)	30.39	15.50	31.67	15.34	0.48	Not Significant
Elaboration (NV)	8.03	8.42	7.86	7.90	0.14	Not Significant
C-Total	55.42	27.81	56.73	24.43	3.54	Significant at 0.01 level

\* V=Verbal, NV= Non Verbal

The above results show that there exists no significant difference in the Originality (V), Originality (NV), Elaboration (V) and Elaboration (NV), dimensions of boys and girls. The significant t-value shows that there exist significant difference in the C-total dimension of boys and girls. This shows that the girls as compared to boys have a higher level of creativity. Therefore, hypothesis 2 is partially accepted.

**Table 3****Mean Difference in Creativity with Regard to Creative Stimulation of School Environment.**

Creativity	M <sub>1</sub>	SD <sub>1</sub>	M <sub>2</sub>	SD <sub>2</sub>	t	Level of Significance
	High Creative Stimulus		Low Creative Stimulus			
Originality (V)	14.35	7.83	9.22	7.33	3.51	Significant at 0.01 level
Originality (NV)	8.22	6.60	6.05	7.00	1.65	Not Significant
Elaboration (V)	32.09	13.07	28.01	13.08	1.58	Not Significant
Elaboration (NV)	10.48	10.16	6.57	6.65	2.36	Significant at 0.05 level
C-Total	65.14	24.69	49.87	21.73	3.41	Significant at 0.01 level

The t-values with regard to Originality (V), Elaboration (NV) and C-total are significant at 0.01 level of significance, while the t-value with regard to Originality (NV), Elaboration (V) are not significant at 0.05 level of significance. The t-values show that there exists significant difference in the Originality (V), Elaboration (NV) and C-total with regard to creative stimulus of school environment.

**Table 4****Mean Difference in Creativity with Regard to Cognitive Environment Dimension of School Environment**

Creativity	M <sub>1</sub>	SD <sub>1</sub>	M <sub>2</sub>	SD <sub>2</sub>	t	Level of Significance
	High Cognitive Dimension		Low Cognitive Dimension			
Originality (V)	13.98	8.30	7.88	7.04	4.07	Significant at 0.01 level
Originality (NV)	7.25	6.52	5.85	7.70	1.02	Not Significant
Elaboration (V)	34.83	14.06	25.38	13.20	3.59	Significant at 0.01 level
Elaboration (NV)	8.01	6.94	5.38	6.03	2.10	Significant at 0.05 level
C-Total	64.03	25.08	44.51	21.87	4.30	Significant at 0.01 level

The t-values with regard to Originality (V), Elaboration (V), Elaboration (NV) and C-total were significant at 0.05 level while the t-value with regard to originality (NV) was not significant. Thus Creative stimulus provided in the school effects creativity to certain extent. Thus hypothesis 4 is accepted.

**Table 5****Mean Difference in Creativity with Regard to Permissiveness Dimension**

Creativity	M <sub>1</sub>	SD <sub>1</sub>	M <sub>2</sub>	SD <sub>2</sub>	t	Level of Significance
	High Permissive		Low Permissive			
Originality (V)	12.85	8.03	8.74	6.89	2.85	Significant at 0.01 level
Originality (NV)	6.09	5.84	6.16	7.37	0.05	Not Significant
Elaboration (V)	34.61	19.08	25.70	11.53	2.93	Significant at 0.01 level
Elaboration (NV)	6.69	6.96	5.70	5.91	1.01	Not Significant
C-Total	60.51	27.87	46.31	29.80	2.98	Significant at 0.01 level

The t-values with regard to Originality (V), Elaboration (V), Elaboration (NV) and C-total were significant at 0.01 level and not significant with regard to originality (NV) and elaboration (NV). Thus hypothesis 5 is partially accepted.

**Table 6****Mean Difference in Creativity with Rich and Poor Home Environment.**

Creativity	M <sub>1</sub>	SD <sub>1</sub>	M <sub>2</sub>	SD <sub>2</sub>	t	Level of Significance
	Rich Env.		Poor Env.			
Originality (V)	14.87	7.13	12.02	7.78	2.79	Significant at 0.01 level
Originality (NV)	9.13	5.11	6.11	6.12	3.98	Significant at 0.01 level
Elaboration (V)	36.12	16.30	32.10	16.28	4.67	Significant at 0.01 level
Elaboration (NV)	11.14	6.70	8.12	7.12	4.43	Significant at 0.01 level
C-Total	68.73	20.10	62.21	21.17	9.75	Significant at 0.01 level

The t-values with regard to Originality (V), Elaboration (V), Elaboration (NV) and C-total were significant therefore there were significant differences between children of rich and poor home environment on all the dimensions of creativity. As per mean values, children of rich home environment were higher on their creativity levels as compared to poor home environment on all the dimensions. Thus hypothesis 6 was accepted.

**CONCLUSIONS**

1. The school environment of government and private schools of Chandigarh did differ with respect to Creative Stimulation, Cognitive Encouragement and Permissiveness dimensions of school environment but did not differ significantly with respect to Rejection, Acceptance, and Controlled dimensions.



2. The government schools of Chandigarh provide greater creative stimulation to their students as compared to those studying in the private schools. Whereas students in the private schools feel greater rejection in their schools as compared to those in government schools.
3. As regards the comparison of creativity of the school students with their school environment, it can be concluded that the government schools of Chandigarh have higher creativity generating environment as compared to private schools of Chandigarh.

The results found in this study can provide impetus for other researchers to conduct further studies aimed at bringing about best practices for parents and teachers to change their school and home environments to stimulate interest for creative and artistic activity in the heart of children. A child's home as well as school can be a wondrous place for creative adventure and growth when stimulated and prepared by good parental attitude, family culture and healthy school environment. The home as well as school is the place of primary influence for a child. This is a fertile ground for stimulation and growth and this study sought to equip parents and teachers to plough that fertile ground.

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