

Creativity of Eleventh Standard Students in Chennai

Dr.R. SahayaMary,

Assistant Professor,

Dept. of Physical Science -Education

Institute of Advanced Study in Education,

Saidapet, Chennai-600 015.

Abstract

The purpose of the study is to find out the level of creativity and to find whether there exists any significant difference between the boys and girls of the eleventh standard students at Saidapet, Chennai. The sample consists of 350 students of which 159 boys and 191 girls selected by random sampling technique. The tool creativity inventory by Robert Epstein was adopted. Mean, standard deviation, t-test and F-test were the statistical techniques employed. The findings of the study show that there is no significant difference between the mean scores of boys and girls based on their creativity.

Keywords: Creativity, Eleventh Standard Students, Gender Differences, Chennai, Creativity Inventory, Educational Research.

INTRODUCTION

Creativity is a concept closely related with talent. It has been considered in terms of process, products and person. Prosperity of a nation and human resource development are largely dependent on development of talent and creativity among individuals. It involves adaptability and flexibility of thought. It is mankind's greatest asset. In educational system creativity in students is mostly neglected. Teachers in the school are so busy in their academic routine. Hence they find little time to think of Cognitive area of creativity and the means to foster it. In dealing with young children, especially at the higher secondary level, the focus should be on the process of developing and generating original ideas, which are seen as the basis of creativity.

NEED AND SIGNIFICANCE OF THE STUDY

Creativity is a function of knowledge, imagination and evaluation which comes into play in different ways in different situations. It sensitizes our problem deficiencies, gaps in knowledge, besides identifying difficulties, and finding solutions. During this period students have greater curiosity to search for new things. So, it is very essential to investigate the creativity of the students studying at higher secondary level. Through education one develops a right attitude and the ability to innovate. True education lies to the extent in which students are trained to evolve the originals in them. Children tend to be naturally creative, but their creativity is dampened as a result of our authoritarian system of education. Hence the present study captioned as "CREATIVITY OF ELEVENTH STANDARD STUDENTS IN CHENNAI"

OBJECTIVES OF THE STUDY

The objectives of the studies are as follows:

1. To measure the levels of creativity of eleventh standard students.
2. To find out the difference on creativity of eleventh standard students based on
 - ❖ Gender
 - ❖ Medium of instruction
 - ❖ Location of the school
 - ❖ Type of school and
 - ❖ Order of birth

HYPOTHESES

1. The level of creativity of the eleventh standard students is average.
2. There is no significant difference between the mean scores of eleventh standard students' creativity based on
 - ❖ Gender
 - ❖ Medium of instruction
 - ❖ Location of the school
 - ❖ Type of school and
 - ❖ Order of birth

METHODOLOGY OF THE STUDY

The study involves descriptive research. The sample consists of 350 students of which 110 from government schools, 115 from government aided schools and remaining 125 from matriculation schools. The sample includes 191 girls and 159 boys. They were selected by adopting random sampling technique.

To test the hypotheses "creativity inventory" (Robert Epstein, 2007) was adopted. Creativity inventory consists of 40 items of which 31 positive and 9 negative items scoring from 5 to 1. The reliability of the tool was computed to be 0.76, through split-half method.

ANALYSIS AND INTERPRETATION OF DATA

The levels of creativity of the eleventh standard students were given below.

TABLE:1.1
THE LEVEL OF CREATIVITY OF ELEVENTH STANDARD STUDENTS

Level	Frequency	Percentage
High (Above 148)	82	23.24
Average Between 147 & 148)	183	52.28
Low (Below 147)	85	24.28

From the table 1.1, it can be derived that 23.24% of the eleventh standard students have high level of creativity, 52.28% of them have average level of creativity and the rest 24.28% belong to the low level of creativity. The overall level of creativity of eleventh standard students is 148.05 and it falls under average level.

To test the hypotheses, t-test and F-test were calculated.

Hypothesis:1

There is no significant difference between the mean scores on creativity of eleventh standard students with regard to their gender..

TABLE:1.2

**DIFFERENCE BETWEEN CREATIVITY OF ELEVENTH STANDARD STUDENTS
BASED ON THEIR GENDER**

Variable	Boys (N=159)		Girls (N=191)		't' Value	LOS
	Mean	S.D	Mean	S.D		
Creativity	148.13	6.6	147.43	5.02	1.34	NS

(At 5% level of significance the table value of 't' is 1.96)

From the above table (1.2) it is cleared that the mean scores of creativity of eleventh standard boys (148.13) are higher than girls (147.43). Based on the 't' values (1.34) calculated for creativity between boys and girls there is no significant difference between them even at 0.05 level. Hence, the hypothesis is accepted.

Hypothesis: 2

There is no significant difference between the mean scores on creativity of eleventh standard students with regard to the medium of instruction.

TABLE: 1.3

**DIFFERENCE BETWEEN CREATIVITY OF ELEVENTH STANDARD STUDENTS
BASED ON THE MEDIUM OF INSTRUCTION**

Variable	Tamil medium (N=200)		English medium (N=150)		't' Value	LOS
	Mean	S.D	Mean	S.D		
Creativity	148.14	82	147.23	89	1.73	NS

From the above table (1.3) it is cleared that the mean scores of creativity of eleventh standard students studying in Tamil medium (148.14) schools is higher than the students studying in English medium (147.23) schools. Based on the 't' values (1.73) calculated for creativity of eleventh standard students between Tamil and English medium schools, there is no significant difference between them even at 0.05 level. Hence, the hypothesis is accepted.

Hypothesis: 3

There is no significant difference between the mean scores on creativity of eleventh standard students with respect to the locality of school.

TABLE: 1.4

**DIFFERENCE BETWEEN CREATIVITY OF ELEVENTH STANDARD STUDENTS
BASED ON THE LOCATION OF THE SCHOOL**

Variable	RURAL (N:100)		URBAN (N:250)		't' Value	LOS
	Mean	S.D	Mean	S.D		
Creativity	148.33	4.6	147.52	5.04	1.41	NS

From the above table (1.4) it is cleared that the mean scores of creativity of eleventh standard students studying at rural schools (148.33) is higher than urban (147.52) schools. Based on the 't' values (1.41) calculated for creativity of eleventh standard students studying in rural and urban schools, there is no significant difference between them even at 0.05 level. Hence, the hypothesis is accepted.

Hypothesis: 4

There is no significant difference between the mean scores on creativity of eleventh standard students based on the type of school.

TABLE: 1.5

**DIFFERENCE AMONG CREATIVITY OF ELEVENTH STANDARD STUDENTS
BASED ON THE TYPE OF SCHOOL**

Variable	Govt.(N=200)		Aided (N=50)		Private(N=100)		'F' Value	LOS
	Mean	S.D	Mean	S.D	Mean	S.D		
Creativity	148.14	8.2	147.64	.9.4	147.03	8.8	1.76	NS

From the above table (1.5) it is observed that the mean scores of creativity of eleventh standard students studying under government schools (148.14) is higher than government aided (147.64) and private (147.03). Based on the 'F' values (1.76) calculated for creativity among eleventh standard students of government, government aided and private schools, there is no significant difference among them even at 0.05 level. Hence, the hypothesis is accepted.

Hypothesis: 5

There is no significant difference between the mean scores on creativity of eleventh standard students with regard to their order of birth.

TABLE: 1.6
DIFFERENCE AMONG CREATIVITY OF ELEVENTH STANDARD STUDENTS
BASED ON THE ORDER OF BIRTH

Variable	1 (N:151)		2(N=160)		3 and above (N=39)		'F' Value	LOS
	Mean	S.D	Mean	S.D	Mean	S.D		
Creativity	147.99	6.1	147.66	5.02	147.21	5.23	0.45	NS

From the above table (1.6) it is noted that the mean scores of creativity of eleventh standard students whose birth order one (147.99) is higher than birth order two (147.66) and birth order three and above (147.21). Based on the 'F' values (1.76) calculated for creativity among eleventh standard students' birth order, there is no significant difference among them even at 0.05 level. Hence, the hypothesis is accepted.

MAJOR FINDINGS

- ❖ Out of 350 eleventh standard students, 23.24% of them had high level of creativity, 52.28% of them had moderate level and the remaining 24.28% of them had low level of creativity. More than half of the students had average (148.05) level of creativity in Chennai. It also falls under average level.
- ❖ The mean scores of boys and girls of eleventh standard students were 148.13 and 147.43 respectively and they had no significant difference between them. The calculated t-values (1.34) are less than the table value (1.96). Hence, it is found that there is no significant difference on creativity based on the gender.
- ❖ The mean scores of eleventh standard students' studying in Tamil medium schools and English medium schools based on creativity were 148.14 and 147.23 respectively and they had no significant difference between them. The calculated t-values (1.73) are less

than the table value (1.96). It was found that there is no significant difference on creativity of the eleventh standard students irrespective of the medium of instruction.

- ❖ The mean scores of eleventh standard students' creativity based on the locality of the school, i.e urban and rural were 147.52 and 148.33 respectively and they had no significant difference between them. The calculated t-values (1.41) are less than the table value (1.96). Hence, it is found that there is no significant difference on creativity based on the locality of the school.
- ❖ The mean scores of eleventh standard students' studying under different schools namely government, government aided and private were 148.14, 147.64 and 147.03 respectively and they had no significant difference among them. Based on F-values (1.76), creativity of eleventh standard students had no significant difference based on the type of schools.
- ❖ The mean scores of eleventh standard students' creativity based on their order of birth viz, 1st order, 2nd order and 3rd and above were 147.99, 147.66 and 147.21 respectively and they had no significant difference among them. Based on the F-values (0.45), it was found that there is no significant difference on creativity of eleventh standard students based on their order of birth.

EDUCATIONAL IMPLICATIONS

The following are some of the major recommendations to improve the creativity of eleventh standard students.

- Teachers should organize science club in schools, there by conducting mathematics seminars and mathematics exhibitions. Teachers should make use of the laboratory and study materials to impart concrete science knowledge in students.

- The teachers should create an environment conducive to full growth and development of the divergent thinking abilities of children.
- Group and team activities may be included in classroom teaching. Students hailing from urban areas excelled in their performance in creativity. This finding should motivate educators in rural schools to engage students in activities that would inculcate creative and critical thinking of students. The goal should be achieved through peer discussions and debates so that their thinking and creative skills could be sharpened.

These are the major points to be considered in the harmonious development of creativity of eleventh standard students.

CONCLUSION

The present study gives the importance of creativity of eleventh standard students. This plays an essential role in creating intellectual minds which will help in promoting the country in future. And this study is sure to find usefulness in the field of education and findings of the study can serve as a data base for further research.

REFERENCES

- Anderson Harold, H., (1990). Creativity and its cultivation. New York: Harper and Brothers.
- Arnold Toynbee, (1964). Has America neglected in Creative minority, In Taylor C.W, Creativity, progress and potential, New Delhi: Mc Graw Hill Co., p.27.
- Chauhan, S.S., (1996). Advanced Educational Psychology, New Delhi: Vikas Publishing, p499-501.
- Dharmangadh, B., (1981). Creativity in Relation to Sex, Age and Locale, Psychological Studies, v26No.1, p.28-33.
- Drevdahi, T.E., (1956). Factors of Importance for Creativity, Journal of Psychology, v12, p.122.
- Jayalekshmi, N.B, William Dharma Raja B, (2011). Does creativity impact Scientific Attitude of School Children? i-manager's Journal on Educational Psychology, v4 No.4 p.33-38,

- ❖ Kalpana Venugopal (2004). Creativity in Teaching and Learning, Journal of Edutracks, pl8-20.
- ❖ Lise Leach S.,(1993). Creative Classification, Journal of Science Teacher, v60, No.9, p.30-32.
- ❖ Nyman, R, De Kock, D.M. (1991). Creative Thinking in Structured Second Language Teaching. Journal of Creative Behavior, v25 n3 p.228-240
- ❖ Orieux, J.A,(1990). Correlates of creative ability and performance in high school students,DissertationAbstracts International, v50, No. 7.
- ❖ Santhana Krishnan. S, (1990). A study of Creativity in relation to some selected variable, Fifth Survey of Educational Research.
- ❖ Sharma K., (1982). Factors related to creativity, Fourth Survey of Educational Research, v1,p.508.
- ❖ Sharma, Shukla, (1987).Verbal Test of Scientific Creativity, Agra: National Psychological Corporation.
- ❖ Shondrick, Denise D, and Others (1992). Interpersonal and Creativity in Boys with and Boys without Learning Disabilities. Learning Disability Quarterly, v15 n2 p.95-102.
- ❖ Torrance, E. P., Orlow, E. B., & SaferH. T. (1990). Torrance tests of creative thinking. Bensenville, IL: Scholastic Testing Service. Publishers.
- ❖ Uma Tandon (2001). Creativity and the role of Teacher Educator, Journal of University News, v39, No.28.
- ❖ Venkoba Narayanappa, Syeeda Akthar, (2007). A study of Creativity of secondary school students in relation to their Academic Achievement and Socio-Economic Status,. Research Journal: Philosophy and Social Sciences, v33, No.2B p.35-48