# **Original Research Paper**



# **Education**

### CREATIVITY OF SECONDARY SCHOOL STUDENTS

Roja Rani Madireddy*	Research Scholar, Dept. of Education, Osmania University, Hyderabad- 500 007. *Corresponding Author
Dr. Shankar Paripally	Assistant Professor, Dept. of Education, IASE, Osmania University, Hyderabad -500 007.

ABSTRACT The world is defined by the innovations and exploration of nature to the maximum extent by the inquisitiveness of man. Creativity is the act of generating novel solutions to critical problems or redefining things in a new way, generating new ideas, exploring new avenues, and making discoveries or inventions that make life comfortable and luxurious. An attempt has been made by the investigator to analyze the Verbal Creativity of students. Aim: The aim of the study is to assess the creativity of secondary school students. Objective: The objective is to study the differences between gender, locality, and class of study on the creativity of secondary school students. Sample: The sample of the present study consists of 600 high school students in the erstwhile Warangal district of Telangana state. Tool: The creativity battery test developed and standardized by Baqer Mehdi (2019) was administered. Conclusion: Results revealed the significant difference between gender, locality, and class of study with regard to the creativity of secondary school students.

# KEYWORDS: Gender, Locality, Class of Study, Secondary School Students and Creativity

#### INTRODUCTION

Education is deeply rooted in society and will never be devastated. Knowledge, awareness, skills, values, interests, talents, creativity, intellect, and attitudes gained through education and training improves the desired quality of life. This quality can improve with the quality of education by developing psychological variables such as intelligence, creativity, and self-concept.

Creativity is the act or ability to create something new through imaginative skills. It's a spiritual process that involves creating new ideas. Creativity is finding concepts or relationships between existing and new concepts or rearranging known ones to find the unknown. The creative process happens in thought. There are two sides to creative thinking; Divergent thinking (intellectual ability to think of many original, diverse and sophisticated thoughts) and Convergent thinking (intellectual ability to logically evaluate criticism and select the best idea from the selected ideas). At first, it was believed that only talented people and special people could be creative. Research shows that only certain attributes are needed to be creative. Creative people need passion and dedication. Entrepreneurial willingness is to understand and take risks, the ability to convince people of new ideas as good or better.

Creativity is central to today's economic and social development, as new products, processes, and services require creative talent. Creativity is a broad topic that is important for a wide range of tasks, both at the individual and social levels. At the individual level, creativity can lead to new ways of dealing with work and everyday life and can lead to solving problems in non-traditional ways. At the social level, creativity can lead to new scientific discoveries, new inventions, new processes, and social reforms. In order to develop an intellectual and knowledgeable society and an innovation economy, educational institutions must provide students with ample opportunities for creative thinking. Further, creativity is the hidden inborn talent that could be influenced by the surrounding environment. It may be influenced by the opportunities and encouragement provided beside the personality traits and inherited characteristics.

#### **REVIEW OF LITERATURE**

Habibollah Naderi et al., (2000) examined the relationship between creativity and academic achievement on gender and locality differences between rural and urban settings. Creativity Scale developed by Singh and Gupta and Academic Achievement marks obtained by the previous academic year were taken into consideration. It was found that creativity and academic achievement scores of boys were higher than girls; urban students were better on creativity and academic achievement than rural students. Shaikh Imran (2002) found that boys secured higher scientific creativity than girls; urban school subjects secured high scientific creativity scores than rural school students. Penner and Pareet (2008) conducted a study on creativity and

academic achievement of rural and urban students. Creativity Questionnaire by Abedi and Academic Achievement marks obtained by the previous academic year were taken into consideration. Findings indicated that the creativity and academic achievement scores of boys were higher than girls and there was a positive and significant relationship between rural and urban students on creativity and academic achievement. Nalini and Bhatta (2009) examined the influence of gender and locality on the creativity and academic achievement of rural and urban secondary school students. Creativity Questionnaire by Abedi and Academic Achievement marks obtained by the previous academic year were taken into consideration. Results revealed that there is a positive and significant relationship between boys and girls on creativity; boys were better academic performance than girls; urban students secured creativity and academic achievement scores than rural students; academic achievement and creativity than government school students. Muhammad Nadeem Anwar et al (2012) explored the relationship between creative thinking and academic achievement of rural and urban secondary school students. Creative Thinking scale developed by Torrance and Academic Achievement marks obtained by the previous academic year were taken into consideration. Results revealed that boys were high creative thinking and academic achievement than girls. Urban students were higher creativity and academic achievement than rural students. Jadab Dutta and Suresh Rajkonwar (2018) investigated the creativity of secondary school students in the Dhemaji district of Assam. This study reported no significant mean difference between male/female, rural/urban, and government/private in the creativity of students of the Dhemaji district. Núria Arís Redó María Ángeles Millán Gutiérrez and José-Diego Vargas Cano (2021) reviewed the most relevant scientific contributions on creativity. Next, the dimensions of creativity in secondary school students who were previously identified as high-ability students were analyzed. The results provided evidence that high-ability students achieve higher scores in both the figurative-creativity and scientific-creativity dimensions. A significant relationship between creativity and high ability was therefore established.

# Objective

 To study the differences between gender, locality, and class of study on the creativity of secondary school students.

### Hypotheses

- There would be no significant difference with regard to the creativity (verbal) of boys and girls.
- There would be no significant difference with regard to creativity (verbal) of rural and urban areas.
- There would be no significant difference with regard to creativity (verbal) of VII<sup>th</sup> and VIII<sup>th</sup> class students.

# METHODOLOGY

#### Sample

The sample of the present study consists of 600 high school students in erstwhile Warangal district (New Districts i.e., Warangal Urban, Warangal Rural, Janagoan, Mulugu, Jayashankar Bhupalapally, and Mahabubabad) of Telangana state. The subjects were in the age group of 14-16 years selected and using the purposive random sampling method.

#### VARIABLES STUDIED

# Independent Variables

- Gender
- Locality
- Class of Study

# Dependent Variable

1. Creativity

#### TOOL.

Assessment of Creativity: The creativity test standardized by Bager Mehdi (2019) was used in the study. It consisted of 10 subtests. Seven of them were verbal tests. This scale has three dimensions i.e., Fluency: A fluency score was obtained by totaling the number of relevant responses given by the subject. Responses that were nonsensical or which did not answer the question was posed, were eliminated before counting them. Flexibility: A flexibility score was obtained by categorizing the responses into as many discrete classifications as suggest themselves. Evidently, the subjectivity of the scorer comes into any measure of flexibility so derived; but consensus agreement among different scorers was employed by way of making the final flexibility score more objective. Originality: Different authors used different procedures to determine the originality of this investigation.

#### RESEARCH DESIGN

As there are three independent variables i.e., Gender (boys & girls), Locality (rural & urban), and Class of Study (VII<sup>th</sup> and VIII<sup>th</sup>), each is divided into two categories, a  $2 \times 2 \times 2$  factorial design was employed in the present study.

# STATISTICALANALYSIS

The obtained data were subjected to statistical analysis employing the techniques such as Means, SDs, and 'F' tests.

### RESULTS AND DISCUSSION

Table-1: Means and SDs for scores on Creativity (Verbal) of secondary school students.

Variables	Category	N	Mean	SD
Gender	Boys	300	132.12	36.13
	Girls	300	143.71	23.61
Locality	Rural	300	135.52	34.80
	Urban	300	147.28	24.44
Class of study	VII Class	300	136.64	35.38
	VIII Class	300	141.17	26.61

A close observation of table-4.7 shows that high school students girls (M=143.71) are better in their creativity in verbal than boys (M=132.12). High school students of urban areas (M=147.28) are better in their creativity in verbal than in rural areas (M=135.52). High school students studying of VIII<sup>th</sup> Class (M=141.17) are better in their creativity in verbal than the VII<sup>th</sup> Class students (M=136.64).

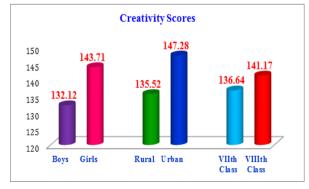


Fig-1: Graphical Representation of Creativity (verbal) in relation to Gender, Locality, and Class of Study of High School Students.

Table-2: Summary of ANOVA for scores on Creativity (Verbal) of secondary school students.

Source of Variance	Sum of Squares	df	MSS	F-Values
Gender (A)	10600.807	1	2305.807	8.20**
Locality (B)	2227.227	1	2227.227	7.91**
Class of study (C)	3137.307	1	3137.307	11.14**
AXB	6990.507	1	1525.507	5.42*
AXC	2562.667	1	2562.667	9.10**
BXC	4805.340	1	2110.340	7.50**
AXBXC	1332.060	1	1332.060	4.73*
Within	166594.747	592	281.410	
Total	198250.660	599		

<sup>\*\* -</sup> Significant at 0.01 level \* - Significant at 0.05 level

### Hypothesis-1: There would be no significant difference with respect to the creativity (verbal) of boys and girls.

As shown in table-2 that the 'F' value for gender is 8.20, which is significant at 0.01 level. It shows that there is a significant difference between the mean creativity scores of boys and girls as measured by verbal tests. The mean scores of boys and girls presented that girls were of higher creativity than boys. Hence, hypothesis-1 is rejected by the results.

### Hypothesis-2: There would be no significant difference with respect to creativity (verbal) of rural and urban areas.

It is evident from the table-2 that the 'F' value for locality is 7.91, which is significant at 0.05 level. It shows that there was a significant difference between the mean score of creativity of rural and urban areas as measured by verbal tests. The mean score of the subjects belonging to urban was 43.41 while those hailing from rural areas scored 35.06. This shows urban subjects are more creative than rural children as measured by the verbal tests. The urban environment is more stimulating and conducive for the development of creativity. Hence, hypothesis-2 is rejected by the results.

#### Hypothesis-3: There would be no significant difference with respect to creativity (verbal) of VII<sup>th</sup> and VIII<sup>th</sup> class students.

Table-4.8 clearly shows indicates that the 'F' value for a class of study is 11.14, which is significant at 0.01 level. It shows that there is a significant difference between the mean score of creativity of students studying of VII<sup>th</sup> and VIII<sup>h</sup> class as measured by verbal tests. The mean score of students studying of VIIIth class was 141.17, while those students studying in VII<sup>th</sup> class scored 136.64. It shows that high school students studying VIII<sup>th</sup> class are more creative than students studying VII<sup>th</sup> class as measured by the creativity of verbal tests. Hence, hypothesis-3 is rejected by the results.

Table-2 clearly indicates that 'F' values of 5.42 gender and locality (AXB), 9.10 gender and class of study (AXC), and 7.50 locality and class of study (BXC) are significant for the first-order interaction and 4.73 genders, locality, and class of study (AXBXC) is significant second-order interaction among three variables, gender, locality and class of study causing the effect on creativity in verbal tests of high school students

# CONCLUSIONS

- There is a significant difference between boys and girls as measured by the verbal test of creativity. Girls are more creative by the verbal test than boys.
- Considering the locality of residence of the subjects, Rural and Urban subjects differ significantly with regard to their creativity as measured by the verbal test. Students hailing from urban are significantly better in the verbal test of creativity than rural subjects.
- High school students studying VIII<sup>th</sup> class are more creative by the verbal test than the students studying VII<sup>th</sup> class as measured by the creativity of verbal tests.

#### REFERENCES

- Dutta and Suresh Rajkonwar (2018). A Study on Creativity of Secondary School Students in Dhemaji District of Assam. International Journal of Research in Social Sciences, 8(11), 318-326.
- Habibollah, N., Rohani, A., Tengku Aizan, J. & Vijav Kumar, M. (2000), An Explorative Study Relationship between Creativity and Academic Achievement of High School Students. Journal of Applied Sciences, 9 (1), 167-172. Muhammad Nadeem Anwar, Muhammad Aness, Asma Khizar, & Muhammad Naseer,
- (2012). Relationship of Creative Thinking with the Academic Achievements of Secondary School Students. International Interdisciplinary Journal of Education, 1 (3),

- Nolume

  Nalini, J. & Bhatta, M.C. (2009). Correlative Study of Gender and Locality on Creativity
  and Academic Achievement among Secondary School Students. Journal of Educational
  Management & Policy, 2(1), 25-37.

  Núria Aris Redó Maria Ángeles Millán Gutiérrez and José-Diego Vargas Cano (2021).

  Dimensions of Creativity in Secondary School High-Ability Students. Eur. J.

  Investig. Health Psychol. Educ. 11, 953-961.

  Penner, L. & Pareet, Y. (2008). Comparative Study on Creativity and Academic
  Achievement of High School Students. Learning and Individual Differences, 18 (4),
  97-112. 4.
- 6.
- Shaikh Imran, D.M. (2002). Examine the Scientific Creativity among Secondary School Students. Unpublished Ph.D. Thesis, Department of Education. Banaras Hindu