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# Study of Creativity Among Boys and Girls of Secondary School

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## Article Info

## ABSTRACT

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In this present investigation we studied about "A comparative Study of Creativity Among Boys and Girls of Class VIII of Secondary School" in Bihar, India with special reference to West Champaran District. The objectives and hypotheses, method and the material chosen to accomplish the requirements of

the study are discussed in this chapter.

**Keywords:** Creativity, Flexibility, Mental Health.

#### I. INTRODUCTION

Students of VIII class belonging to different secondary schools located in West Champaran district in Bihar state constituted the population for the study. Among West Champaran revenue district, the schools located in urban and rural areas were selected at random from each sub-division and 2 schools each from rural and urban areas were selected at random from each subdivision. Five boys and five girls were selected at random from each of the school, thus giving a total of 600 subjects for the study, equally distributed between the two sexes, two localities and two schools of each locality. The distribution of the sample of the subjects in different sub-groups is presented in table.

#### II. OBJECTIVES

The following objectives are setup for the present study.

- To find out whether boys and girls differ in their creativity.
- To find out whether children were belonging to rural and urban localities differ in their creativity.
- To examine whether students of different school of class VIII of study are significantly related to creativity.

To examine whether high and low perceived school environment, mental ability and mental health of students with regard to their creativity.

#### III. HYPOTHESES

- **1a:** There would be significant difference with respect to fluency scores (verbal) of creativity of boys and girls.
- **1b:** There would be significant difference with respect to fluency scores (verbal) of creativity of students belonging to rural and urban localities.

**1c:** There would be significant difference with respect to fluency scores (verbal) of creativity of students

of different school of study.

#### **SAMPLE**

| SCHOOL                      | URBAN |       | JRBAN SCHOOL                |      | RURAL |     |
|-----------------------------|-------|-------|-----------------------------|------|-------|-----|
|                             | BOYS  | GIRLS |                             | BOYS | GIRLS |     |
| K. R. High School, Bettiah  | 50    | 50    | S. Heart. High School,      | 50   | 50    | 200 |
|                             |       |       | Banu Chhapra, Bettiah.      |      |       |     |
| Kendriya Vidyalay , Bettiah | 50    | 50    | S. B. S. High School, Bagha | 50   | 50    | 200 |
| TOTAL                       | 100   | 100   |                             | 100  | 100   | 400 |

#### IV. MATERIAL AND METHODS

A bio-data sheet was prepared seeking information about the respondents' sex, locality, type of management, type of family, education and occupation of the parents etc.

### **CREATIVITY TEST**

Creativity battery test re standardized by Rajasekhar Reddy (2004) was used in the study. The test is the modified version of Creativity test developed and standardized by Venkatarami Reddy in 1982. The battery of creativity tests used consisted of 10 subtests. Seven of them were verbal tests while the remaining three were nonverbal tests. The present study is focused on the study of the mental health, mental ability and school environment on Creativity. The major hypotheses in the study were concerning the influence of gender (boys and girls), locality of residence (rural and urban) and Class of study (8th, 9th and 10th class) on creativity. An attempt was made to ascertain whether the differences in gender, locality and class of study were any significant relationship with the creativity of the subjects. The fluency flexibility and originality and composite creativity scores of the subjects were analyzed separately for verbal tests and nonverbal tests and also for the total of verbal and nonverbal tests, applying analysis of variance of 2X2X3 factorial design.

#### **VERBAL TESTS**

Table -2: Mean and SDs Fluency Scores of different subgroups

| Category       |       | N   | Mean   | SD    |
|----------------|-------|-----|--------|-------|
| Gender         | Boys  | 300 | 103.02 | 16.55 |
|                | Girls | 300 | 92.98  | 14.46 |
| Locality       | Rural | 300 | 99.45  | 15.09 |
|                | Urban | 300 | 100.55 | 17.45 |
|                | VIII  | 200 | 92.75  | 17.30 |
| Class of Study | IX    | 200 | 95.96  | 16.69 |
|                | X     | 200 | 98.75  | 17.30 |

Table two shows the mean fluency scores and SDs of different sub groups of the subjects on the verbal tests it could be seen from the table that the mean scores of the boys was 103.02 while that of girls scores was 92.98 this shows that boys scored higher than girls. It could be seen from the table that the students from urban scored better than those from rural subjects. The mean scores of urban students were 100.55, while that of rural students was 95.45. When the students were classified according to class of study which they belonged, it was found that the mean score of the students of8th class was the least, while students of 10th class scored the highest, 9th class students falling in between. The mean scores of the students of the three classes were -8th class 92.75, 9th class 95.96, and 10th class 98.75 respectively.

| Source of Variance | Sum ofSquares | df  | Mean Sumof Squares | F        |
|--------------------|---------------|-----|--------------------|----------|
| Gender(A)          | 15130.28      | 1   | 15130.28           | 67.74 ** |
| Locality (B)       | 3896.40       | 1   | 3896.40            | 17.45 ** |
| Class of Study (C) | 2338.81       | 2   | 1169.41            | 5.26 *   |
| AXB                | 473.48        | 1   | 473.48             | 2.10@    |
| AXC                | 2733.61       | 2   | 1366.81            | 6.19 *   |
| BXC                | 7066.01       | 2   | 3533.01            | 15.81 ** |
| AXBXC              | 213.61        | 2   | 106.81             | 0.47 @   |
| WSS                | 131334.78     | 588 | 223.36             |          |
| Total              | 163186.99     | 599 |                    |          |

Table-3: Results of ANOVA of the Fluency Scores on Verbal Tests.

To examine whether there was any significant between creativity of the students belonging to different gender, localities and class of study, and to probe into the effect of the interaction between different variables, the creativity scores of different sub groups of subjects analyzed using analysis of variance and the results obtained are shown in table 3.

#### V. RESULTS AND DISCUSSION

## Hypothesis -1a

There would be significant difference with respect to fluency scores (verbal) of creativity of boys and girls.

The hypothesis 1a stated that there would be significant difference with respect to fluency scores (verbal) of creativity of boys and girls. It could be seen from the table the F value for gender was 67.72, which was significant at 0.01 level. This shows that there was significant difference between the mean fluency scores of boys and girls as measured by verbal tests. The mean scores of boys and girls presented in table II shows that boys

was higher than girls. The results are corroborated with the earlier findings of Kellly, 1965; Middents, 1968; Raina, 1970; Goyal, 1973; Narayana,1981; Venkat Rama Reddy and Bala Krishna Reddy, 1984; Chandrakant, 1987; Tegano and Moran,1989; Singh, 1991; Yang and Ching,2004; Naderi,2008; Saima Siddiqi, 2011; Smritikana Mitra,2013who also found that boys performed better than girls. Based on the results obtained, the first hypothesis stating that there would be significant difference with respect to fluency scores (verbal) of creativity of boys and girls is accepted.

Social norms, traditions, customs, family structure, rearing practices etc., the movements of adolescent; girls especially are restricted and their activities are

<sup>\*\*</sup> Significant at 0.01 level \* Significant at 0.05 level@ Not Significant

closely supervised not only by parents and caretakers but also by neighbors in the close communities. Their thinking is guided so as to conform to the social norms and the activities also restricted which sets limits to their creativity, unlike the case of boys.

## Hypothesis -1b

## There would be significant difference with respect to fluency scores (verbal) of creativity of students belonging to rural and urban localities.

The hypothesis 1b predicted that there would be significant difference with respect to fluency scores (verbal) of creativity of students belonging to rural and urban localities. The F value for locality was 17.45, which was significant at 0.01 level, indicating a significant difference between rural and urban subjects. The mean score of the subjects belonging to urban was 100.05 while those hailing from rural localities scored 95.45. This shows urban subjects were more creative than rural children as measured by the fluency component of verbal tests. Urban environment is more stimulating and conducive for the development of creativity. Passi, 1972; Singh, 1977; Srivatsava, 1981; Agarwal and Gupta, 1982; Venkatrami Reddy and Bala Krishna Reddy, 1984; Singh and Singh, 1984Marsh,1985; Mishra,2000; Muhammad Nadeem Anwar et al 2012; Bashir and Hussain, 2012also found that urban students are more creative compared to those hailing from rural areas. The results of the present study are in line with these findings. Based on the results obtained the hypothesis 1b stating that there would be significant difference with respect to fluency scores (verbal) of creativity of students belonging to rural and urban localities is accepted as warranted by the results.

Over the past few decades Indian society is influenced by Western culture, the society is fast getting modernized. Participation in socio cultural aspects, innovative curriculum, stimulated school environment, interaction with public, life style,

facilities available, opportunities, exposure etc., fortunately will be more in urban life than rural. This explains the development of creative thinking between rural and urban students.

### Hypothesis -1c

## There would be significant difference with respect to fluency scores (verbal) of creativity of students of different class of study.

The hypothesis 1c predicted that there would be significant difference with respect to fluency scores (verbal) of creativity of students of different class of study. The F value of 5.26 was significant at 0.05 level. This shows that there was significant difference between the creativity of the students belonging to different class of study. The obtained mean of 8th class, 9th class and 10th classes were 92.75, 95.96 and 98.75. Each group differs significantly from the others. 8th class students scored the least, while the students of 10th class scored somewhat highest than9th class students and the 9th students falling in between 8th and 10th class students. The results are corroborated with the earlier findings of Piers, Daniels and Quackenbush, 1960; Iscoe and Pierce, 1963; Olshin, 1965; Ogletree, 1971; Ahmrf, 1980; Dharmangadan, 1981; Passi, 1982; Venkat Rami Reddy and Salina 1988; Sudhakar Reddy, 1989; also found a significant and positive relationship between age and level of education and the creativity of the students.

According to Torrance (1962) creativity gets hampered whenever there is stress on the child. The stress may be in the form of adjusting to new environment, transition from one school to another and one society to another. Up to secondary school final examination (10<sup>th</sup> class) students are promoted to higher classes based on their attendance. But at SSC level there is pressure on the child to achieve better academic grade points. This pressure on studies promotes achievement, naturally curbs creative thinking. The same findings were observed in the present

investigation. The F value of 2.10 for gender and locality interaction, which was not significant, indicates that the effect of sex was independent of the locality to which students belonged and vice versa. The F value 6.19 for gender and class of study interaction, which was significant at 0.05 level, indicates that the effect of sex was not independent of the class to which the students belonged, and vice versa. The obtained mean values also clearly indicating the significant difference between the variables. The F value of 15.81 for locality and class of study interaction was significant at 0.01 level. This indicates that the effect of both variables on each other. The F value of the three-factor interaction (GXLXC) was 0.47, which is not significant, indicating that the effect of any two variables taken at a time was independent of the level of the third variable.

#### VI. CONCLUSION

Creativity is the act or ability to create something new through imaginative skills. It is a mental process involving the generation of new ideas. Creativity is finding concepts or association between existing and new concepts or rearranging what is known in order to find out what is not known. Hence, creativity has become a chief psychosocial motif of the 20th century. Creativity is more than a word today. It is an incantation. It is a kind of psychic wonder. Creative talent makes history through reshaping man's world.

There is significant difference between the creativity of boys and girls as measured by the verbal and nonverbal tests. Boys scored significantly better than Girls. This was true for all the components of creativity- fluency, flexibility, originality and composite creativity score.

With regard to the variable, class of study; there was a significant difference between the creativity of the children belonging to different class of study as measured by the verbal and non- verbal tests. X class

students scored better than VIII and IX class students, VIII class students secured low creativity scores and IX class students are in between. In case of the creativity- fluency, flexibility, originality and composite creativity score.

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