

Study of Flexibility Among Boys and Girls of Secondary School in Terms of Different Aspects of Flexibility

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ABSTRACT

In this present investigation we studied about flexibility 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 paper.

Keywords : Creativity, Flexibility, Mental Health.

I. INTRODUCTION

The purpose of this study was to investigate differences for boys and girls in terms of the relation between different aspects of flexibility. A sample of 50 boys and 50 girls’ studying in two secondary schools of West Champaran district was randomly selected. I had personally met the participants and administered the tool. Torrance Test of Creative thinking (Verbal Form A) designed by E. P. Torrance (1968) was used. Mean S.D.S and T-test were calculated to analyse the data. 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.

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IV. HYPOTHESES

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

- c:** There would be significant difference with respect to flexibility scores (verbal) of creativity of students of different school of study.

4. METHODOLOGY

Sample: A sample of 50 boys and 50 girls studying in two secondary schools of West Champaran district was selected on random basis for the study. The sample was equal on age and socio-economic status.

Design of the Study: In the present study descriptive survey method was used.

Instrument of the Study: Torrance Test of Creative Thinking (Verbal TTCT: Thinking Creatively with Words Form A) designed by E.P. Torrance (1968) was used. The test is appropriate for the kindergarten level (age 6) through the graduate level and beyond, and can be individual or group administered. It requires 30 to 45 minutes of working time. Translated into over 35 languages, the Torrance Test of Creative Thinking is a test in which anyone could respond to—regardless of previous experience. This test is recommended as the best standardised measure to use because of the preponderance of evidence of reliability and validity over time and in different cultures.

V. FLEXIBILITY

Table -1: Mean and SDs Flexibility Scores of different sub groups

Category		N	Mean	SD
Gender	Boys	300	66.37	24.49
	Girls	300	53.84	23.98
Locality	Rural	300	57.68	24.78
	Urban	300	62.52	25.06
Class of Study	VIII	200	57.78	25.72
	IX	200	59.43	24.23
	X	200	64.10	24.65

Table 1 shows the mean flexibility scores of different sub groups of the subjects on verbal test. It may be seen from the table that as in the case of the fluency, for flexibility also boys scored better than girls. The mean scores of boys were 66.37 while that of girls was 53.84. In case of locality, urban students (M=62.52)

scored better than rural students ($M=67.68$) as in the case of fluency component. The mean score of 8th, 9th and 10th class were 56.78, 59.43 and 64.10 respectively. This shows that 8th class students scored least while the students of 10th class students scored the highest. To examine the differences between the mean scores of the subjects belonging to different gender, localities and class of study, the flexibility scores of different subgroups were further analyzed by analysis of variance and results obtained are presented in table 2.

Table-2: Results of ANOVA of the Flexibility Scores on Verbal Tests.

Source of Variance	Sum of Squares	df	Mean Sum of Squares	F
Gender (A)	2353.61	1	2353.61	41.68 **
Locality (B)	3513.84	1	3513.84	6.22 *
Class of Study (C)	5500.90	2	2750.45	4.87 *
AXB	1404.54	1	1404.54	2.49 @
AXC	1840.20	2	920.10	1.63 @
BXC	7151.79	2	3575.89	6.33 **
AXBXC	22.69	2	11.35	0.20 @
WSS	332047.60	5 8 8	564.71	
Total	375019.17	5 9 9		

** Significant at 0.01 level, * Significant at 0.05 level @ Not Significant

Hypothesis -a

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

Hypothesis 2a predicted 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 that the F value for gender was 41.68, which was significant at 0.01 levels. This indicates that there was significant difference between boys and girls with regard to the flexibility score as measured by the verbal tests. The mean scores of boys ($M= 66.37$) and girls ($M=53.84$). Presented in table 2 shows that boys were higher than that of girls. Hence, the hypothesis stating that there would be significant difference with respect to fluency scores (verbal) of

creativity of boys and girls is accepted. Based on the results obtained, the first hypothesis stating that there would be significant difference with respect to flexibility scores (verbal) of creativity of boys and girls is accepted.

Hypothesis -b

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

The F value for locality ($F=6.22 < 0.05$). An observation of the mean scores presented in table IV reveals that urban students ($M=62.52$) scored better than rural students ($M=57.68$) on the component as was the case of fluency. This shows urban subjects were more creative than rural children as measured by the flexibility component of verbal tests. The hypothesis 2b stating that there

would be significant difference with respect to flexibility scores (verbal) of creativity of students belonging to rural and urban localities is accepted as warranted by the results.

Hypothesis -c

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

Considering the class of study, the F value obtained was 4.87 which were significant at 0.05 level, indicating a significant difference between the flexibility scores of the subjects belonging to different classes. The mean score of 8th, 9th and 10th class were 56.78, 59.43 and 64.10 respectively. This shows that 8th class students scored least while the students of 10th class students scored the highest. Each group differs significantly from the others. 8th class students scored the least, while the students of 10th class scored somewhat highest than 9th class students and the 9th students falling in between 8th and 10th class students.

The F value of the interaction between gender and locality was not significant. This shows that the gender effect on the creativity of the children was independent the locality to which they belong. The F value of the interaction between sex and class of study was not significant. This shows that the gender effect on the creativity of the children was independent of the class to which they belong and the vice versa.

The F value for the interaction between locality and class of study was significant at 0.01 level. An examination of mean scores of the subjects classified according to two variables shows that irrespective of their locality and sex, students of VIII class were the least score, while students of X class scored the highest mean in the group. It may be seen from the table however, that though the direction of the difference between the means was more for the both sexes. This shows that the magnitude of difference from class to class was not similar. A similar phenomenon was observed in case of

fluency component also as discussed earlier. The F value (AXBXC) for three factor interaction was not significant, indicating that the effect of any two variables taken at a time was independent of the level of 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. The present investigation is an attempt to study the impact of mental health, mental ability and school environment on creativity among High school students. In addition to study the impact of gender, locality of residence, class of study etc., on creativity. There is significant difference between high and low creative students on their mental health. High creative students were found to be good mental health than low creative groups. This was true for all the sub groups without any exception. High creative students were found to be more intelligence than low creative groups. This was true for all the sub groups without any exception. High creative students were found to be good perception towards school environment than low creative groups. This was true for all the sub groups without any exception. Size of the family of the subjects was not shown any significant effect with regard to their creativity. Type of family of the subjects was shown significant effect on their creativity. Students from nuclear family were better creativity than the students from nuclear family. There is no significant difference between order of birth of the subjects on their creativity.

Due to hectic schedule and dual career system, parents are sparing less time to identify creative ideas of their own children. An awareness of the importance of parent child relationship should be explained to parents during parent teacher meeting. Teachers, legislators and mass media communications can also do this job. The school takes care of only physical health and provides necessary physical

exercise to children. No attention is been paid to promote the cognitive styles of children through co-curricular activities. Schools are the second home to child and facilitate to promote new concepts and ideas. Learning environment is influenced by the creativity of the students. The students are free from problems, the classroom is conducive for effective teaching and learning purposes, it definitely influences the students to promote new ideas and skills. Through schooling and its associated activities students are to be creative, constructive and co-operative with co- age group.

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