

A study of creativity in relation to reactions to frustration and academic achievement of secondary school

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Abstract

The present investigation intended to find out the relationship of creativity, reactions to frustration and academic achievement of secondary school students (separately for boys and girls), if the effect of intelligence is taken out. A sample of 220 students (110 boys and 110 girls) of IX class was drawn randomly from different government aided schools of Amritsar city. The findings of the study revealed that reactions to frustration is related positively with creativity for secondary school students, such relationship does not exist in case of boys and girls taken separately. Further no significant relationship between creativity and academic achievement was investigated, if the effect of intelligence is taken out. A significant positive relationship was found between reactions to frustration and academic achievement of secondary school students.

Keywords: Non verbal test; Rosenzweig picture; General mental ability.

Introduction

The desire to achieve something of excellence is inherent in all human beings. It refers to the ability of the individual who strives to accomplish something to do his best, to excel each other in performance. Educationally, the word achievement refers to an individual's performance upto a desired level in a particular field. Achievement in any subject, skill or area is influenced by a large number of factors like intelligence, study habits, interest, etc. Intelligence is the aggregate or global capacity of an individual to act purposefully, think rationally and deal effectively with the environment. Progress and advancement of society takes place due to creative production. Creativity is one of the most important components of an individual's personality which places the human beings ahead even in the science dominated age. Creativity is the expression of our uniqueness. Creativity is regarded as the product of remote associations. It is the creation of something new and useful. Whenever an individual does not achieve his target, he feels frustrated. Frustration refers to failure to satisfy the basic needs, desire and requirements because of either condition in the individual himself or external obstacles in the

environment. Frustration occurs whenever the organism meets a more or less insurmountable obstacle or obstruction in its route to satisfaction of any vital need. Throughout their lives, all the human beings meet such situations in which they are unable to satisfy their motive promptly or completely. Frustration is considered to be the result of an unsatisfied need or a thwarted desire. As a result of frustration, the abilities of today's youth is lost, their productivity ruined and their ambitions thwarted. It has become a threat in modern life. Zhou, *et al.*, (2010) found that that frustration positively predicted externalizing problems, and externalizing problems negatively predicted academic achievement. Study conducted by Xiaoxia (2010) revealed that creativity was related with academic achievement for both boys and girls. Habibollah (2009) investigated no significant relationship between creativity and academic achievement for males and females. Further, research findings showed that there were no significant differences between male and female students on creativity and intelligence.

Objectives of the Study

1. To find out the relationship between reactions to frustration and creativity (separately for boys and girls).
2. To find out the relationship between creativity and academic achievement (separately for boys and girls), if the effect of intelligence is taken out
3. To find out the relationship between reactions to frustration and academic achievement (separately for boys and girls), if the effect of intelligence is taken out.

Hypotheses of the Study

1. There will be no significant relationship between reaction to frustration and creativity among secondary school boys and girls.
2. There will be no significant relationship between creativity and academic achievement among secondary school boys and girls, if the effect of intelligence is taken out.
3. There will be no significant relationship between reactions to frustration and academic achievement among secondary school boys and girls, if the effect of intelligence is taken out.

Materials and Method

Sample of the Study

A sample of 220 students (both boys and girls) of IX class was drawn randomly from government as well as privately managed recognized secondary schools of Amritsar city, which prepared the students for eighth class annual examination conducted by Punjab School Education Board.

Tools Used

1. Non-verbal Test of Creative thinking by Baqer Mehdi (1989)
2. Rosenzweig picture – frustration study by Udai Pareek (1959)
3. Group test of General Mental Ability
4. Academic Achievement was measured from the results of eighth class annual examination of the students conducted by P.S.E.B.

To have accurate picture of the study, the data was tested for normality. Regression equation was employed to academic achievement and intelligence for partialing out the effect of

intelligence from academic achievement score. 3 X 3 fold chi-square test was employed to investigate the relationship between creativity and frustration and relationship between reactions to frustration and academic achievement. Co-efficient of correlation was employed to find out the relationship between creativity and academic achievement.

Table 1: Showing values of chi-square for reactions to frustration and creativity of secondary school students.

S.No.	Group	N	Value of chi-square
1.	Boys	110	1.27
2.	Girls	110	06.4
3.	Total Sample	220	11.23*
*Significant at 0.05 level of significance			

Results and Discussion

Results of the present study reveals that the calculated value of chi-square for secondary school boys and girls are 1.27 and 6.4 respectively. The value of chi-square in both cases is statistically insignificant, indicating no significant relationship between creativity and frustration among secondary school boys and girls taken separately. Value of chi-square for total sample is 11.23 (table 1), which is significant at 0.05 level of significance. This shows that there exists a significant relationship between creativity and frustration among secondary school students. Thus, the hypothesis (1), “There will be no significant relationship between reaction to frustration and creativity among secondary school boys and girls” is partially accepted. Croisile (2010) concluded that highly creative children were superior in scholastic achievement to pupils with high IQ’s, although the high creative pupils had 20 IQ points lower than the high IQ

Table 2. Showing values of co-efficient of correlation between creativity and academic achievement of secondary school students

S.No.	Group	N	Coefficient of co-relation
1.	Boys	110	0.02
2.	Girls	110	0.03
3.	Combined Sample	220	0.13

students-indicating a positive relationship between creativity and academic ability.

It is observed in the present study that values of co-efficient of correlation for secondary school boys is 0.02 and for girls is 0.03. For the total sample value of 'r' is 0.13 (table 2). The values of co-efficient of co-relation in all three cases are statistically insignificant. This shows that no significant relationship exists between creativity and academic achievement, if the effect of intelligence is taken out. Thus, the hypothesis (2) which states that, "There will be no significant relationship between creativity and academic achievement among secondary school boys and girls, if the effect of intelligence is taken out" stands accepted. Similar findings have also been reported by Olatoye *et al.* (2010).

Table 3. Showing values of chi-square for reactions to frustration and academic achievement of secondary school students

S.No.	Group	N	Value of chi-square
1.	Boys	110	11.15
2.	Girls	110	12.18
3.	Combined Sample	220	11.34

It is revealed in the present study that value of co-efficient of correlation for secondary school boys is 11.15 and for girls is 12.18. For the total sample value of 'r' is 11.34 (table 3). The values of co-efficient of co-relation in all three cases are statistically significant. This shows that a significant and positive correlation exists between reactions to frustration and academic achievement, if the effect of intelligence is taken out. Thus, the hypothesis (3) which states that, "There is no significant relationship between reactions to frustration and academic achievement among secondary school boys and girls, if the effect of intelligence is taken out" stands rejected. The present finding is supported by Hinton (1968).

Conclusion

1. There exists a significant positive relationship between reaction to frustration and creativity among secondary school students, whereas a

significant relationship between the two variables do not exist secondary school boys and girls taken separately.

2. No significant correlation exists between creativity and academic achievement of secondary school students as well as boys and girls taken separately. If the effect of Intelligence is taken out.
3. Reaction to frustration relates significantly with academic achievement of secondary school students as well as boys and girls taken separately, if the effect of Intelligence is taken out.

Implications

The findings are indicative of the fact that teachers should ensure a creativity and intelligent friendly school environment. Moreover, cognitive, emotional and social support should be made available to the child within the home also. Intellectual abilities and further academic achievement of the children can be developed and substantially influenced by the way they are encouraged by their parents and teachers.

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