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A STUDY OF ACADEMIC ACHIEVEMENT OF SENIOR SECONDARY SCHOOL STUDENTS IN RELATION TO THEIR CREATIVITY

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ABSTRACT This study examined the academic achievement of senior secondary school students in relation to their creativity. The study adopted a descriptive survey method of research. Participants were 800 senior secondary school students randomly selected from sixteen schools in Gurgaon and Rewari districts of Haryana state (400 boys & 400 girls) belongs from urban and rural areas. The research instruments used for data collection were: Divergent Production Ability Test by Dr. K.N. Sharma and matric examination marks/ grades were taken for academic achievement, tested at the 0.05 & 0.01 level of significance. The findings indicated that there exist a significant difference in academic achievement of senior secondary school students in relation to their High and Low Creativity. There is a significant difference in academic achievement of male and female senior secondary school students in relation to their High and Low Creativity. There is a significant difference in academic achievement of urban and rural senior secondary school students in relation to their High and Low Creativity.

KEYWORDS :

Introduction

Creativity, we usually understand an activity resulting in some new product of a definite social value. Creativity is also a very important process for progress and major advances in every field. Research indicates the importance of creativity in student's achievement, career success, personal well being to improve student's achievement and success. It is the basis of all social development and new inventions and discoveries in the field of science and technology.

Academic achievement is the accomplishment or acquired proficiency in the performance of an individual in a given skill or a body of knowledge. In other words it means the pupil's needs or drive towards the achievement of success in academic work. Educators have therefore been interested in those factors which influence or associated with academic achievement. Academic achievement is influenced by a multitude of factors. In the beginning, psychologists focused only on cognitive aspects like intelligence but research has shown that social and emotional factors like emotional intelligence, creativity, anxiety, personality, family relationship etc. affect the achievement of students. So, the variables Academic Achievement and Creativity of the students need inquiry for proper understanding of a student. Hence the present study is a humble attempt to search an empirical database with certain hypothesis.

Objectives of the study

1. To study the academic achievement of senior secondary school students in relation to their High and low Creativity.
2. To study the Academic Achievement of male senior secondary school students in relation to their high and low creativity.
3. To study the Academic Achievement of female senior secondary school students in relation to their high and low creativity.
4. To study the Academic Achievement of urban senior secondary school students in relation to their high and low creativity.
5. To study the Academic Achievement of rural senior secondary school students in relation to their high and low creativity.

Hypotheses of the study

1. There is no significant difference in academic achievement of senior secondary school students in relation to their High and Low Creativity.
2. There is no significant difference in academic achievement of male senior secondary school students in relation to their High and Low Creativity.
3. There is no significant difference in academic achievement of female senior secondary school students in relation to their High and Low Creativity.
4. There is no significant difference in academic achievement of urban senior secondary school students in relation to their High and Low Creativity.
5. There is no significant difference in academic achievement of rural senior secondary school students in relation to their High and Low Creativity.

Need of the Study

School education is an important segment of the total educational system contributing significantly to the individual as well as to national development. A good school provides environment conducive for development of cognitive, affective and psychomotor domains for all round development of individuals. The primary function of the school is the imparting of academic skills. Early research on the predictors of academic achievement focused primarily on intellectual and ability factors. There is considerable evidence that intelligence alone does not account for all the variance in academic achievement (Lavin, 1967, Cattel Butcher, 1968, Vernon, 1950). Although intelligence is perhaps the still most effective predictors of academic achievement research has shown that social and emotional factors like emotional intelligence, creativity, anxiety, personality, family relationship etc. affect the achievement of students.

Hence, it was thought worthwhile to understand the complete abilities and potentialities of the child before giving him/her education.Creativity is also a very important process for progress and major advances in every field. Research indicates the importance of creativity in student's achievement, career success, personal well being to improve student's achievement and success. It is the basis of all social development and new inventions and discoveries in the field of science and technology. So, the variables Academic Achievement and Creativity of the students need inquiry for proper understanding of a student. Moreover, no such coherent endeavor has been undertaken on senior secondary school students of Gurgaon and Rewari District and hence the present study is a humble attempt to search an empirical database with certain hypothesis.

Research Design

Methodology

The present study was conducted through descriptive survey Method. This method is one of the important methods in education, because it describes the current position of the present research.

Sample

Random sampling was used in the present study, where every

individual has equal chance of being selected in the final sample. Eight hundred (800) male and female, urban and rural, government and private senior secondary school students were included in the present study as subjects. Sixteen (16) senior secondary schools affiliated to the Board of School Education, Haryana, Bhiwani were taken in the study. The study included two districts of Haryana i.e. Gurgaon and Rewari.

Research Tools

The following tools were selected and used in the study:

1. Divergent Production Ability Test by Dr. K.N. Sharma (2006).
2. Marks/Grades obtained by the students in 10th class examination conducted by Board of School Education, Bhiwani (Haryana) taken as indicator of academic achievement of the students.

Statistical Techniques used:

Mean, Standard Deviation and t-test was used.

Testing Hypotheses

1. ACADEMIC ACHIEVEMENT OF SENIOR SECONDARY SCHOOL STUDENTS IN RELATION TO LOW AND HIGH CREATIVITY

The mean and't' score of senior secondary school students having low and high creativity is given in table 1.

Table 1 't' value for the academic achievement scores of senior secondary school students having low and high creativity

Group	N	Mean	S.D.	't' value
Low creativity	216	54.79	7.76	19.970**
High creativity	216	74.20	5.50	

**Significant at 0.01 level of significance.

Table 1 reveals that't' value between senior secondary school students having low and high creativity ('t' = 19.970) is significant at 0.01 level. In the context of mean scores, it was found that mean score of senior secondary school students having high creativity is higher than mean scores of senior secondary school students having low creativity. Hence, the null hypothesis framed earlier, "There is no significant difference in academic achievement of senior secondary school students in relation to their high and low creativity" is not retained. This shows that students having high creativity have better academic achievement than students having low creativity.

2. ACADEMIC ACHIEVEMENT OF MALE SENIOR SECONDARY SCHOOL STUDENTS IN RELATION TO LOW AND HIGH CREATIVITY

The mean and 't' score of male senior secondary school students having low and high creativity is given in table 2.

Table 2 't' value for the academic achievement scores of male senior secondary school students having low and high creativity

Group	N	Mean	S.D.	't' value
Low creativity	108	51.19	5.83	21.824**
High creativity	108	73.01	6.58	

**Significant at 0.01 level of significance.

Table 2 reveals that't' value between male senior secondary school students having low and high creativity ('t' = 21.824) is significant at 0.01 level. In the context of mean scores, it was found that mean score of male senior secondary school students having high creativity is higher than mean scores of male senior secondary school students having low creativity. Hence, the null hypothesis framed earlier, "There is no significant difference in academic achievement of male senior secondary school students in relation to their high and low creativity" is not retained. This shows that male students having high creativity have better academic achievement than male students having low creativity.

3. ACADEMIC ACHIEVEMENT OF FEMALE SENIOR SECONDARY SCHOOL STUDENTS IN RELATION TO LOW AND HIGH CREATIVITY

The mean and 't' score of female senior secondary school students having low and high creativity is given in table 3.

Table 3 't' value for the academic achievement scores of female senior secondary school students having low and high creativity

Group	N	Mean	S.D.	't' value
Low creativity	108	50.81	5.66	20.133**
High creativity	108	70.18	8.24	

**Significant at 0.01 level of significance.

Table 3 reveals that't' value between female senior secondary school students having low and high creativity ('t' = 20.133) is significant at 0.01 level. In the context of mean scores, it was found that mean score of female senior secondary school students having high creativity is higher than mean scores of female senior secondary school students having low creativity. Hence, the null hypothesis framed earlier, "There is no significant difference in academic achievement of female senior secondary school students in relation to their high and low creativity" is not retained. This shows that female students having high creativity have better academic achievement than female students having low creativity.

4. ACADEMIC ACHIEVEMENT OF URBAN SENIOR SECONDARY SCHOOL STUDENTS IN RELATION TO LOW AND HIGH CREATIVITY

The mean and't' score of urban senior secondary school students having low and high creativity is given in table 4.

Table 4 't' value for the academic achievement scores of urban senior secondary school students having low and high creativity

Group	N	Mean	S.D.	't' value
Low creativity	108	49.31	5.87	19.671**
High creativity	108	69.37	8.82	

**Significant at 0.01 level of significance.

Table 4 reveals that't' value between urban senior secondary school students having low and high creativity ('t' = 19.671) is significant at 0.01 level. In the context of mean scores, it was found that mean score of urban senior secondary school students having high creativity is higher than mean scores of urban senior secondary school students having low creativity. Hence, the null hypothesis framed earlier, "There is no significant difference in academic achievement of urban senior secondary school students in relation to their high and low creativity" is not retained. This shows that urban students having high creativity have better academic achievement than urban students having low creativity.

5. ACADEMIC ACHIEVEMENT OF URBAN SENIOR SECONDARY SCHOOL STUDENTS IN RELATION TO LOW AND HIGH CREATIVITY

The mean and't' score of rural senior secondary school students having low and high creativity is given in table 5.

Table 5 't' value for the academic achievement scores of rural senior secondary school students having low and high creativity

Group	N	Mean	S.D.	't' value
Low creativity	108	53.93	5.60	16.094**
High creativity	108	73.64	5.49	

**Significant at 0.01 level of significance.

Table 5 reveals that 't' value between rural senior secondary school students having low and high creativity ('t' = 16.094) is significant at 0.01 level. In the context of mean scores, it was found that mean score of rural senior secondary school students having high creativity is higher than mean scores of rural senior secondary school students having low creativity. Hence, the null hypothesis framed earlier, "There is no significant difference in academic achievement of rural senior secondary school students in relation to their high and low creativity" is not retained. This shows that rural students having high creativity have better academic achievement than rural students having low creativity.

Main Findings:

1. There is a significant difference in academic achievement of senior secondary school students in relation to their High and Low Creativity. This shows that students having high creativity have better academic achievement than students having low creativity.
2. There is a significant difference in academic achievement of male senior secondary school students in relation to their High and Low Creativity. This shows that male students having high creativity have better academic achievement than male students having low creativity.
3. There is a significant difference in academic achievement of female senior secondary school students in relation to their High and Low Creativity. This shows that female students having high creativity have better academic achievement than female students having low creativity.
4. There is a significant difference in academic achievement of urban senior secondary school students in relation to their High and Low Creativity. This shows that urban students having high creativity have better academic achievement than urban students having low creativity.
5. There is a significant difference in academic achievement of rural senior secondary school students in relation to their High and Low Creativity. This shows that rural students having high creativity have better academic achievement than rural students having low creativity.

Conclusion

The study revealed that significant difference was found in academic achievement of senior secondary school students in relation to their High and Low Creativity. This shows that students having high creativity have better academic achievement than students having low creativity. **Chauhan and Sharma (2017)** investigated the relationship of student's creativity and academic achievement and found the creativity is important in predicating the students' academic achievement.

There was a significant difference found in the academic achievement of male and female senior secondary school students in relation to their high and low creativity. This shows that male and female students were having high creativity have better academic achievement than male and female students having low creativity and data also shows that the male students were more creative than the female students. Data also revealed that rural area students showed more creativity compared to urban area students. **Ai (1999)** studied the relation between creativity and academic achievement and found that creativity was related to academic achievement for both boys and girls.

Suggestions for further Research

- Similar study can be done on a large sample.
- Similar study may be conducted on college students.
- The present study was restricted to class XI. Other classes of school can also be included in the sample.
- The statistical techniques, which were used in the present study, are mean, standard deviation and t-test. More statistical techniques may be used in the same study.
- This type of study can be done to other cities of Haryana State.

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