A Study on Creativity of Secondary School Students in Lakhimpur and Sonitpur Districts of Assam

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Abstract: The present study investigated the creativity of secondary school students in Lakhimpur and Sonitpur districts of Assam. The study was conducted on four hundred class-X students by giving due representation to boys (200) and girls (200) as well as rural and urban localities of both the districts. The 08 Government and 04 Private secondary schools were selected using stratified random sampling technique, and students were selected using simple random sampling technique. The descriptive survey method is used for data collection using creativity test developed by Baqer Mehdi. The findings of the study were there was no significant mean difference on creativity between male/female, rural/urban as well as government/private secondary students of both the districts of Assam.

Keywords: Creativity and Secondary School Student.

I. INTRODUCTION

Creativity has been seen as the only uniquely “human” characteristic, defining an area where, for instance, microelectronics cannot go. In this view, creative thinking is a base of human dignity in an age where machines, especially computers, seem to be taking over routine skilled activities and everyday thinking. Openness, courage, and the like, which are themselves seen as both pre-requisites for and results of a healthy personality, creativity is thought to foster positive adjustment to life. In educational settings, creativity is seen as a special approach to learning that involves both “creative” teaching and “creative” learning strategies. These strategies facilitate learning and are simultaneously a result of appropriate teaching and learning.

II. REVIEW OF RELATED STUDY

Pandey (1981) has made an investigation of creativity as related to rural-urban background, sex socio-economic status and formal education. He found that creativity had an insignificant but slightly positive relationship with the upper socio-economic status group and had an insignificant but slightly negative relationship with the lower socio-economic status. Also he found the significant difference among the mean creativity scores of rural and urban students.

Agarwal, S. (1982) studied creativity as a function of self-esteem, risk-taking and home background. The study gave the following conclusions: (i) Risk taking more or less, was found to be a positive and significant factor in fostering creativity of both the sexes. (ii) Self-esteem was found to be a significant factor to promote creativity, especially in the case of boys. In the case of girls its impact was not very powerful. (iii) Socio economic condition of the home played no role or very insignificant role in fostering creativity of both the sexes. (iv) In all the designs, parental acceptance was found to be very significant and positive factor in the development of creativity of both the sexes. (v) Parental rejection was to be a negative and demoting factor in creative development especially in the case of boys. In the case of girls its effect was not observable. (vi) Except social risk-taking, other types of risk-taking and self-esteem did not interact with each other to affect creativity. (vii) Risk-taking and socio-economic condition did not interact to influence creativity. (viii) Risk taking its various ramifications did not interact with parental acceptance and rejection to influence creativity. (ix) Self-esteem and socio-economic conditions did not interact with each other to affect creativity of either sex. (x) Self-esteem and parental acceptance did not interact to influence creativity of either boys or girls. (xi) Self-esteem and parental rejection did not know interact significantly to influence creativity. (xii) Risk taking and parental acceptance were found to be more important predictors of creativity than self-esteem and socio-economic conditions.
Sharma (1982) in a study of four types of schools government, private aided, public and central schools revealed that the institutional climate of schools was not related to the creativity of students. Central school students were the most creative followed by public, private aided and government schools and students’ perception of teachers’ behavior were related to creativity. 

Chaudhary (1983) found no significant difference between the mean creative thinking scores of male and female children from rural and urban areas. 

Annie (2007) conducted a study of creativity among over achievers and under achievers of students of IX standard in relation to certain psycho-social factors. The findings of the study were: (i) IX standard students vary in respect of their anxiety, economic value and social value. (ii) the boys and girls belonging to over achievers, under achievers and normal achieving group differ in their verbal creativity. (iii) anxiety has positive correlation with verbal, non-verbal and total creativity for over achievers and under achievers. 

Niyicor. Riggon, Dutta. Jadab and Soni. J. C. (2016) conducted a study on “Intelligence, Creativity and Academic Achievement of Secondary School Students of Arunachal Pradesh”. This study was conducted on eight hundred (800) class-X students by giving due representation to boys and girls as well as rural and urban localities of two districts in Arunachal Pradesh, namely: East Siang and Lohit. The schools were selected using stratified random sampling technique, and students were selected using simple random sampling technique. The selected schools belong to the category of government as well as private schools which are affiliated to CBSE i.e., Central Board of Secondary Education, New Delhi and controlled and supervised by the Department of Education, Govt. of Arunachal Pradesh. The descriptive survey method is used for data collection. As far as intelligence was measured by using the group test of mental ability constructed and standardized by Dr. S. Jalota. The creativity of the students was measured by using the creativity test developed by Baqer Mehdi and The academic achievement of the students was concerned for the purpose of the present study, the investigators visited the selected schools and collected the school records of the selected students i.e. mark’s obtained by the students in the last annual examination, 2015 (i.e. Class IX annual examination). The findings of the study reported that except for intelligence the mean scores of academic achievement and creativity is higher in case of students of East Siang district than that of Lohit district; and From the comparison between academic achievement, intelligence and creativity of government and private school students both the districts, it is also found that both districts private school students are academically, creatively and mentally (intelligence) better than government school students.

Implications of the Review of the Related Literature with the Present Study
Review of related literature allows the researcher to acquaint himself with current knowledge in the area in which he has proposed to conduct his research. It serves the following purposes:
- It provided as sources of problems and helped in identifying and selecting a problem of interest.
- It gave an understanding of the status of research in the problem area.
- It enabled researcher to develop an understanding of the research methodology which refers to the way the study is to be conducted. It developed an insight into tools and instruments, and statistical methods through which validity of the results is to be established.
- It enabled the researcher to define the limits of his field. It helped the researcher to delimit and define his problem.
- It made researcher up to date on the work which others have done.
- It provided researcher to avoid unintentional duplication of well-established findings
- It provided clues to the research approaches, methods, instrumentation and data analysis.

Need of the study
Creativity refers to having inventive, productive and imaginative qualities. A creative person is able to link the existing information with new information in productive ways. Students who are creative may often be referred to as gifted or talented. Creative students, for example have a keenly observe a situation and have a desire to improve their abilities, produce variety of possible solutions to problem, are curious, original, comfortable with ambiguity, able to work independently, able to analyse and synthesise information, demonstrate compulsivity and an urgency to complete a task or execute an idea and have multiple latent abilities and characteristics of persistence. Thus, creative one plays with the existing knowledge and information and combines in a unique ways that a creative product or idea is formed. This motivates the investigator to conduct a study on creativity of secondary school students of Lakhimpur and Sonitpur districts of Assam.

Statement of the Problem
The problem of the present study has been stated as follows:
“A Study on Creativity of Secondary School Students in Lakhimpur and Sonitpur Districts of Assam”

Objectives of the Study
The study is designed with the following objectives:

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1. To test the significance of the mean differences on Creativity of (a) male and female (b) rural and urban (c) government and private secondary school students of Lakhimpur and Sonitpur Districts (total sample) of Assam.

2. To test the significance of the mean differences on Creativity of (a) male and female (b) rural and urban (c) government and private secondary school students of Lakhimpur District of Assam.

3. To test the significance of the mean differences on Creativity of (a) male and female (b) rural and urban (c) government and private secondary school students of Sonitpur District of Assam.

Hypotheses of the Study
The hypotheses are stated as under:
1. There is no significant difference in the mean scores of creativity between (a) male and female (b) urban and rural (c) government and private secondary school students of Lakhimpur and Sonitpur Districts (total sample) of Assam.

2. There is no significant difference in the mean scores of creativity between (a) male and female (b) urban and rural (c) government and private secondary school students of Lakhimpur District of Assam.

3. There is no significant difference in the mean scores of creativity between (a) male and female (b) urban and rural (c) government and private secondary school students of Sonitpur District of Assam.

Methodology of the Study
The Descriptive method is used in the study.

Population of the Study
The population of the present study constitutes all the secondary school students studying in class X who are the creative of Lakhimpur and Sonitpur districts of Assam.

Sample of the Study
The sample is of small number of representative individuals from the population. The study was conducted on one thousand class-X students by giving due representation to boys (200) and girls (200) as well as rural and urban localities of both the districts. The schools were selected using stratified random sampling technique and students were selected using simple random sampling technique. However all the students of the selected schools formed the sample of the present study.

Selection of Schools and Final Sample
In Assam two districts were considered for this present study. From these two districts two stratified groups namely rural and urban schools were selected. After completion of stratification with respect to rural and urban schools, sample was selected randomly with equal proportion from the said stratified groups (rural and urban). The selected schools belong to the category of provincialized as well as private schools which are affiliated to SEBA i.e., Board of Secondary Education, Assam and controlled and supervised by the Department of Education, Govt. of Assam. The extent of the final sample is shown in Diagram -1 and the break-up of the final sample is shown Table –1.

Diagram – 1
The extent of the final samples

Districts

Table – 1: Break up of Sample in terms of districts, locality and sample size wise

<table>
<thead>
<tr>
<th>Schools N</th>
<th>Lakhimpur</th>
<th>Sonitpur</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural (03)</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>Urban (03)</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

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Tool Used
The researchers used the verbal creativity test developed by Baqer Mehdi. This test has four activities. First three activities have three questions or problems, each problem related to three factors namely; fluency, flexibility and originality and last activity are descriptive type. Only 1 hour were given to administer it to the students.

Statistical Techniques Used
In this study various statistical measures such as Mean, SD and t-test are used.

Delimitation of the Study
The present study will be delimited to:
1. The students of class-X only.
2. Two districts of Assam viz Lakhimpur and Sonitpur.
3. Only 100 samples was taken from both the districts.
4. Only one variable (creativity) taken in the study.

Operational Definition of the terms Used
In the present study a few terms has been frequently used and have got specific meaning for the present investigation. Given below are conceptual definitions of the terms used.
1. Creativity: Creativity may be defined as the ability to discover new solutions to problems or to produce new ideas, inventions, or work of art.

Result and Discussion
Collected data through above mentioned inventories were analyzed in terms of mean, standard deviation and t-test method. The results have been presented in the tables.

Hypothesis-1: There is no significant difference in the mean scores of creativity between (a) male and female (b) urban and rural (c) government and private secondary school students of Lakhimpur and Sonitpur Districts (total sample) of Assam.

Table -2
Showing the mean, standard deviation and t-value of the creativity between (a) male and female, (b) urban and rural and (c) government and private secondary school students in Lakhimpur and Sonitpur districts (total sample) of Assam.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>t-value</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creativity</td>
<td>Male</td>
<td>200</td>
<td>21.19</td>
<td>18.40</td>
<td>-0.14</td>
<td>Not Significant</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>200</td>
<td>21.45</td>
<td>18.69</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>200</td>
<td>21.38</td>
<td>19.43</td>
<td>0.07</td>
<td>Not Significant</td>
</tr>
<tr>
<td></td>
<td>Urban</td>
<td>200</td>
<td>21.25</td>
<td>17.63</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
A Study on Creativity of Secondary School Students in Lakhimpur and Sonitpur Districts of ... 

<table>
<thead>
<tr>
<th>Variable</th>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>t-value</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creativity</td>
<td>Male</td>
<td>100</td>
<td>28.65</td>
<td>20.89</td>
<td>-0.38</td>
<td>Not Significant</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>100</td>
<td>29.73</td>
<td>19.81</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>100</td>
<td>27.9</td>
<td>19.46</td>
<td>-0.89</td>
<td>Not Significant</td>
</tr>
<tr>
<td></td>
<td>Urban</td>
<td>100</td>
<td>30.48</td>
<td>21.15</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Government</td>
<td>100</td>
<td>30.47</td>
<td>18.96</td>
<td>0.89</td>
<td>Not Significant</td>
</tr>
<tr>
<td></td>
<td>Private</td>
<td>100</td>
<td>27.91</td>
<td>21.60</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results from above Table-2 showed that the mean scores on creativity of male and female students were 21.19 and 21.45 respectively. When the t-test was applied to compare the mean scores of both the groups, it was found that the calculated t-value -0.14 was less than the table value 1.97 at 0.05 levels of significance. Therefore, the null hypothesis is accepted. This means there was no significant difference on creativity between male and female secondary students of both the districts (total sample).

The mean scores on creativity of both rural and urban students were 21.38 and 21.25 respectively. When the t-test was applied to compare the mean scores of both the groups, it was found that the calculated t-value (0.07) was lower than the table value 1.97 at 0.05 level of significance. This means that the mean difference was not significant. Hence, hypothesis is accepted. This further means that rural and urban secondary school students of both the districts (total sample) were having similar on creativity.

The mean scores on creativity of both government and private students were 21.58 and 21.06 respectively. The computed CR (t) between their mean differences was 0.28. This was found not significant at 0.05 level. Hence, hypothesis is accepted. This means that there was no significant difference between creativity of government and private secondary students of both districts (total sample).

**Hypothesis-2:** There is no significant difference in the mean scores of creativity between (a) male and female (b) urban and rural (c) government and private secondary school students of Lakhimpur district.

**Table-3**

Showing the mean, standard deviation and t-value of the creativity between (a) male and female (b) urban and rural (c) government and private secondary school students in Lakhimpur district of Assam.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>t-value</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creativity</td>
<td>Male</td>
<td>100</td>
<td>28.65</td>
<td>20.89</td>
<td>-0.38</td>
<td>Not Significant</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>100</td>
<td>29.73</td>
<td>19.81</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>100</td>
<td>27.9</td>
<td>19.46</td>
<td>-0.89</td>
<td>Not Significant</td>
</tr>
<tr>
<td></td>
<td>Urban</td>
<td>100</td>
<td>30.48</td>
<td>21.15</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Government</td>
<td>100</td>
<td>30.47</td>
<td>18.96</td>
<td>0.89</td>
<td>Not Significant</td>
</tr>
<tr>
<td></td>
<td>Private</td>
<td>100</td>
<td>27.91</td>
<td>21.60</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From the above Table, it can be observed that the mean scores of both male and female students were 28.65 and 29.73 respectively. When the t-test was applied to compare the mean scores of both the groups, it was found that the calculated t-value (-0.38) is less than the table value 1.98 at 0.05 level of significance. Hence, hypothesis is accepted. This means that there was no significant difference in creativity of male and female secondary students of Lakhimpur district.

The mean scores on creativity of both rural and urban students were 27.9 and 30.48 respectively. When the t-test was applied to test the significance of the mean difference between these groups, it reported a CR (t) value -0.89. This was found to be not significant. Hence hypothesis is accepted. This further means that there was no difference on creativity of both rural and urban secondary students of Lakhimpur district.

The mean scores on creativity of both government and private students were 30.47 and 27.91 respectively. The computed t-value between their mean differences was 0.89 which were found to be not significant at 0.05 levels. Hence hypothesis is accepted. Therefore government and private secondary students of Lakhimpur district were found similar on creativity.

**Hypothesis-3:** There is no significant difference in the mean scores of creativity between (a) male and female (b) urban and rural (c) government and private secondary school students of Sonitpur District.
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Table -4
Showing the mean, standard deviation and t-value of the creativity between (a) male and female (b) urban and rural (c) government and private secondary school students in Sonitpur District of Assam.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>t-value</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creativity</td>
<td>Male</td>
<td>100</td>
<td>13.72</td>
<td>11.48</td>
<td>0.32</td>
<td>Not Significant</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>100</td>
<td>13.16</td>
<td>13.09</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>100</td>
<td>14.6</td>
<td>12.50</td>
<td>1.34</td>
<td>Not Significant</td>
</tr>
<tr>
<td></td>
<td>Urban</td>
<td>100</td>
<td>12.28</td>
<td>12.01</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Government</td>
<td>100</td>
<td>12.68</td>
<td>12.19</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Private</td>
<td>100</td>
<td>14.2</td>
<td>12.38</td>
<td>-0.87</td>
<td>Not Significant</td>
</tr>
</tbody>
</table>

The mean scores on creativity of male and female students were 13.72 and 13.16 respectively. The computed CR (t) between their mean differences is 0.32. This was not found significant at 0.05 level. Hence, hypothesis is accepted. This further means that there is no difference on creativity of male and female secondary students of Sonitpur district.

The mean scores on creativity of both rural and urban students were 14.6 and 12.28 respectively. The computed t-value between their mean differences was 1.34. This was found not significant at 0.05 level. Hence hypothesis is accepted. Therefore, rural and urban secondary students of Sonitpur district were found similar on creativity.

The mean scores on creativity of both government and private students were 12.68 and 14.2 respectively. When the t-test was applied to compare the mean difference of both the groups, it was found that the calculated t-value (-0.87) was less than the table value 1.98 at 0.05 levels of significance. This means that government and private secondary students of Sonitpur district have no differences in their creativity.

III. FINDINGS OF THE STUDY

1. There was no significant mean difference on creativity between male/female, rural/urban as well as government/private secondary students of both the districts of Assam.
2. There was no significant mean difference on creativity between male/female, rural/urban as well as government/private secondary school students of Lakhimpur district.
3. There was no significant mean difference on creativity between male/female, rural/urban as well as government/private secondary school students of Sonitpur district.

IV. CONCLUSION

The present study was mainly concerned on the Creativity of Secondary School Students in Lakhimpur and Sonitpur Districts of Assam. From analysis and interpretations of this study the researcher found that the overall performance of the Lakhimpur, Sonitpur and total scores of both the districts’ male/female; rural/urban; and government/private students do not differ significantly on creative ability. The present researcher tried to figure out reason for the low creative ability of both the districts in Assam. Most of the people of Assam live in a rural area. They are economically poor as compared to others, this lead to poor foundation of students in their educational carrier. Secondly, most of the parents are uneducated. Generally uneducated parents are unaware about the scientific knowledge in the modern world of today. Even the educated parents could not give sufficient time for their children to guide them in their educational field. Thirdly, the government of Assam cannot provide sufficient fund for the school development. Fourthly, due to lack of proper supervision from education department, local teachers remain absent from their duty. The numbers of teachers are less in remote rural areas. Fifthly, many schools have not sufficient infrastructural facilities. Even the teachers are untrained, no library, no proper guidance and counseling center, no special classes for weaker students, no proper co-curricular and extra-curricular activities etc. which add to their causes of poor academic performance as well as mental development.

REFERENCES

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