CREATIVE THINKING OF MIDDLE SCHOOL STUDENTS IN RELATION TO THEIR SOCIO ECONOMIC STATUS AND INTELLIGENCE

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Abstract

Present study is an attempt to study the creative thinking of middle school students in relation to socio economic status and intelligence. A sample of 200 students of 8th class of Sirsa district is selected randomly. The investigators have used verbal test of creative thinking by Baqer Mehdi Socio economic status scale by Prof. R.A. Singh and Prof. S.K. Saxena and Mental intelligence test by Dr. Radhey Shyam Jalota to know about creative thinking among 8th class students of Sirsa district in relation to socio economic status and intelligence. For analysis and interpretation of the data mean Karl Pearson's correlation, standard deviation and t-test are used. The major findings of the study showed negligible relation among creative thinking, socio economic status and intelligence.

Keywords: creative thinking, socio-economic status, intelligence

Adolescence is a period when there is maturation in emotions, physique and social behaviour of a person. A lot of changes take place during this period and the human being enters into a responsible age. In this period students used some creative idea to make something new. Creativity is a goal directed thinking which is unusual novel and useful. Creativity is defined as something different from intelligence and as a parallel construct to intelligence but it differs from intelligence in that it is not restricted to cognitive or intellectual functioning or behaviour. Ahmar (2013) in his study, examined the effects of gender and socio-economic status on creativity of higher

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Middle School students of Lucknow city. This study shows that gender does not influence the achievement in science at higher Middle School (Standard -XI) level. It is found that the creativity was influenced by the socio-economic status and those who belonged to high socio-economic status showed better performance. Based on these findings some recommendation was given with great implication for both practice and further studies. Jamadar (2015) investigated that conjoint off impact of Social Economic Status towards the prediction of Emotional intelligence and Creativity among tribal students. Accordingly, 100 tribal samples, 50 boys and 50 girls of VIII, IX & X class from Vivekananda Tribal Centre for learning (VTCL), Hosahalli, H.D.Kote, Mysore. Runisah (2016) in his study aimed to describe enhancement and achievement of students creative Thinking Skills in mathematics (CTSM) as a result of 5E learning cycle with Metacognitive Techniques (LCM) .The study reveal that in terms of overall and in all school level, the enhancement and of achievement of students CTSM who received LCM is better than those who received 5E learning cycle (LC) and and conventional Learning (CL). Koza (2017) conducted the research and the results of the random effect model showed that socioeconomic status has a high level of effect on student achievement .On the account of above discussions, this study is an attempt to investigate that whether there is exist positive relationship among creative thinking, socio-economic status, and intelligence or not.

STATEMENT OF THE PROBLEM

CREATIVE THINKING OF MIDDLE SCHOOL STUDENTS IN RELATION TO THEIR SOCIO-ECONOMIC STATUS AND INTELLIGENCE.

OPERATIONAL DEFINITION OF THE STATEMENT

Creative Thinking: In the present study creative thinking refers to a way of looking at problems or situations from a fresh perspective that suggests unorthodox solutions. For measuring creative thinking verbal test of Baquer Mehndi tool is used (1913).

Socio-Economic Status: In the present study socio economic status means to an individual or groups position within a hierarchical social structure. Socio-
economic status depends on a combination of variables, including occupation, education, income, and place of residence. For measuring Prof. R.A. Singh and Prof. Saxena tool is used (1981).

**Intelligence:** In the present study intelligence refers to ability to learn, understand or to deal with new situations. The ability to apply knowledge to manipulate one's environment or to think abstractly. For measuring intelligence Dr. S. Jalota tool is used (1976).

**OBJECTIVES OF THE STUDY**

1. To study the relationship between creative thinking and intelligence of middle school students.
2. To study the relationship between creative thinking and socio-economic status of middle school students.
3. To find out the difference in creative thinking between male and female middle schools students.
4. To find out the difference in socio-economic status between male and female middle school students.
5. To find out the difference in intelligence between male and female middle school students.
6. To find out the difference in creative thinking between rural and urban middle school students.
7. To find out the difference in socio-economic status between rural and urban middle school students.
8. To find out the difference in intelligence between rural and urban middle school students.

**HYPOTHESES OF THE STUDY**

1. There is no significant relationship between creative thinking and socio-economic status of Middle School students.
2. There is no significant relationship between creative thinking and intelligence of Middle School students.
3. There is no significant difference between male and female with reference to creative thinking.
4. There is no significant difference between male and female with reference to socio-economic status.
5. There is no significant difference between male and female with reference to intelligence.
6. There is no significant difference between rural and urban students with reference to creative thinking.
7. There is no significant difference between rural and urban students with reference to socio-economic status.
8. There is no significant difference between rural and urban students with reference to intelligence.

DELIMITATIONS OF THE STUDY

1. The study was restricted to Sirsa district only.
2. The study was restricted to middle school students only.
3. The study was restricted to a sample size of 200 students only.

RESEARCH METHOD

The research method adopted for present study is the normative survey method to study creative thinking of Middle school students in relation to their socio-economic status and intelligence.

POPULATION AND SAMPLE

All private Middle school students of Sirsa district constituted the population of the study. In the present study the simple random sampling was used. 200 Middle school students were selected by random technique from the School of Sirsa District.

TOOLS USED

(i) Verbal test of Creative Thinking by Baqer Mehdi (1973)
(ii) Mental Intelligence Test by Dr. S. Jalota (1976)
(iii) Socio-economic status by Prof. R.A. Singh and Prof. S.K. Saxena was used. (1981)

STATISTICAL TECHNIQUE

- Mean
- S.D.
- t test
- Karl Pearson's Correlation
ANALYSIS OF THE DATA

SECTION-I

This section deals with the relationship between creative thinking intelligence and social economic status of Middle School Students.

Table- 4.1

<table>
<thead>
<tr>
<th>Variables</th>
<th>No.</th>
<th>df</th>
<th>Value</th>
<th>Level of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creative thinking</td>
<td>200</td>
<td>398</td>
<td>0.172408</td>
<td>Significance at both levels i.e., 0.5 &amp; 0.01</td>
</tr>
<tr>
<td>Socio economic status</td>
<td>200</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From Table 4.1 it is found that obtained r-value is 0.172408 for variable of creative thinking and socio economic status. The obtained value shows low positive correlation between creative thinking and socio economic status. The calculated r value is 0.172408 which is greater than table value at both 0.05 and 0.01 levels of significance. So, it is significant at both levels. So, null hypothesis i.e., there is no significant relationship between creative thinking and socio economic status is rejected. It means there is significant correlation between creative thinking and socio economic status.

Table- 4.2

<table>
<thead>
<tr>
<th>Variables</th>
<th>No.</th>
<th>df</th>
<th>Value</th>
<th>Level of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creative thinking</td>
<td>200</td>
<td>398</td>
<td>0.107</td>
<td>Significance at both levels i.e., 0.5 &amp; 0.01</td>
</tr>
<tr>
<td>Intelligence</td>
<td>200</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From Table 4.2 it is revealed that obtained r-value is 0.107 for variable of creative thinking and intelligence. The obtained value shows low positive correlation between creative thinking and intelligence. The calculated r value is 0.107 which is greater than table value at both 0.05 and 0.01 levels of significance. So, it is significant at both levels. So, null hypothesis i.e. there is no significant relationship between creative thinking and intelligence is rejected. It means there is significant correlation between creative thinking and intelligence.
SECTION-II

This section deals with the differential among creative thinking intelligence and social economic status with regard to gender locality of middle school students.

Table 4.3
Comparisons of mean scores of creative thinking of middle school students with regard to gender

<table>
<thead>
<tr>
<th>Variables</th>
<th>Group</th>
<th>No.</th>
<th>df</th>
<th>Mean</th>
<th>SD</th>
<th>t' value</th>
<th>Level of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creative thinking</td>
<td>Male</td>
<td>100</td>
<td>198</td>
<td>88.75</td>
<td>17.15</td>
<td>0.33</td>
<td>Not significance at both levels i.e., 0.05 &amp; 0.01</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>100</td>
<td></td>
<td>87.99</td>
<td>15.10</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From Table 4.3 it is revealed that Mean and Standard Deviation of creative thinking of the Male of middle school students are 88.75 & 17.15 and for female of middle school students are 87.99 & 15.10. The calculated ‘t’ ratio is 0.33 which is lower than table value at both 0.05 and 0.01 levels of significance. So, it is not significant at both levels of significance. So, null hypothesis i.e. there is no significance difference between Male and female with reference to creative thinking is accepted. It means there is no significant difference between male and female of middle school students regarding creative thinking.

Table 4.4
Comparisons of mean scores of Socio economic status of middle school students with regard to gender

<table>
<thead>
<tr>
<th>Variables</th>
<th>Group</th>
<th>No.</th>
<th>df</th>
<th>Mean</th>
<th>SD</th>
<th>t' value</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Socio economic status</td>
<td>Male</td>
<td>100</td>
<td>198</td>
<td>57.07</td>
<td>6.76</td>
<td>5.32</td>
<td>Significance at both levels i.e., 0.05 &amp; 0.01</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>100</td>
<td></td>
<td>61.54</td>
<td>5.14</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From Table 4.4 it is revealed that Mean and Standard Deviation of socio economic status of Males of middle school students are 57.07 & 6.76 and for females of middle school students are 61.54 & 5.14. The calculated ‘t’ ratio is 5.32 which is more than table value at both 0.05 and 0.01 levels of significance. So, it is significant at both levels of significance. So, null hypothesis i.e. there is no significance difference between
Male and female with reference to Socio economic status is rejected. It means there is significant difference between male and female of middle school students regarding socio economic status.

**Table 4.5**

Comparisons of mean scores of intelligence of middle school students with regard to gender

<table>
<thead>
<tr>
<th>Variables</th>
<th>Group</th>
<th>No.</th>
<th>df</th>
<th>Mean</th>
<th>SD</th>
<th>t’ value</th>
<th>Level of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intelligence</td>
<td>Male</td>
<td>100</td>
<td>198</td>
<td>64.12</td>
<td>15.08</td>
<td>1.29</td>
<td>Not Significance at both level i.e., 0.05 &amp; 0.01</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>100</td>
<td></td>
<td>66.74</td>
<td>13.67</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From **Table 4.5** it is revealed that Mean and Standard Deviation of intelligence of males of middle school students are 64.12 & 15.08 and for females of middle school students are 66.74 & 13.67. The calculated 't' ratio is 1.29 which is lower than table value at both 0.05 and 0.01 levels of significance. So, it is not significant at both levels of significance. So, null hypothesis i.e. there is no significance difference between male and female with reference to intelligence is accepted. It means there is no significant difference between male and female of middle school students regarding intelligence.

**Table 4.6**

Comparisons of mean scores of creative thinking of middle school students with regard to locality

<table>
<thead>
<tr>
<th>Variables</th>
<th>Group</th>
<th>No.</th>
<th>df</th>
<th>Mean</th>
<th>SD</th>
<th>t’ value</th>
<th>Level of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creative thinking</td>
<td>Rural</td>
<td>100</td>
<td>198</td>
<td>84.36</td>
<td>18.74</td>
<td>3.64</td>
<td>Significance at both level i.e., 0.05 &amp; 0.01</td>
</tr>
<tr>
<td></td>
<td>Urban</td>
<td>100</td>
<td></td>
<td>92.38</td>
<td>11.57</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From **Table 4.6** it is revealed that Mean and Standard Deviation of creative thinking of rural middle school students are 84.36 & 18.74 and for urban middle school students are 92.38 & 11.57. The calculated’ ratio is 3.64 which is more than table value at both 0.05 and 0.01 levels of significance. So, it is significant at both levels of significance. So, null hypothesis i.e., there is no significance difference between rural and urban students with reference to creative thinking is rejected. It means there is a
significant difference between rural and urban student with reference to creative thinking.

Table 4.7
Comparisons of mean scores of socio economic status of middle school students with regard to locality

<table>
<thead>
<tr>
<th>Variables</th>
<th>Group</th>
<th>No.</th>
<th>df</th>
<th>Mean</th>
<th>SD</th>
<th>t' value</th>
<th>Level of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Socio economic</td>
<td>Rural</td>
<td>100</td>
<td>198</td>
<td>58.42</td>
<td>6.53</td>
<td>1.98</td>
<td>Significance at both level i.e., 0.05 &amp; 0.01</td>
</tr>
<tr>
<td>status</td>
<td>Urban</td>
<td>100</td>
<td></td>
<td>60.19</td>
<td>6.17</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From Table 4.7 it is revealed that Mean and Standard Deviation of socio economic status of rural middle school students are 58.42 & 6.53 and for urban middle school students are 60.19 & 6.17. The calculated 't' ratio is 1.98 which is more than table value at 0.05 levels of significance. So, it is significant at 0.05 level of significance. So, null hypothesis i.e., there is no significance difference between rural and urban students with reference to socio economic status is rejected. It means there is a significant difference between rural and urban student with reference to socio economic status.

Table 4.8
Comparisons of mean scores of intelligence of middle school students with regard to locality

<table>
<thead>
<tr>
<th>Variables</th>
<th>Group</th>
<th>N</th>
<th>df</th>
<th>Mean</th>
<th>SD</th>
<th>t' value</th>
<th>Level of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>intelligence</td>
<td>Rural</td>
<td>100</td>
<td>198</td>
<td>67.35</td>
<td>15.09</td>
<td>2.05</td>
<td>Significance</td>
</tr>
<tr>
<td></td>
<td>Urban</td>
<td>100</td>
<td></td>
<td>63.41</td>
<td>12.06</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From Table 4.8 it is revealed that Mean and Standard Deviation of intelligence of rural middle school students are 67.35 & 15.09 and for urban of middle school students are 63.41 & 12.06 .The calculated 't' ratio is 2.05 which is more than table value at 0.05 levels of significance. So, it is significant at 0.05 level of significance. So, null hypothesis i.e., there is no significance difference between rural and urban students with
reference to intelligence is rejected. It means there is a significant difference between rural and urban student with reference to intelligence.

FINDINGS

1. There exists significant positive relationship between creative thinking and socio-economic status.
2. There exists significant positive relationship between creative thinking and intelligence.
3. There is no significant difference between male and female with reference to creative thinking.
4. There exists significant difference between male and female with reference to socio-economic status.
5. There is no significant difference between male and female with reference to intelligence.
6. There exists significant difference between rural and urban with reference to creative thinking.
7. There exists significant difference between rural and urban with reference to socio-economic status.
8. There exists significant difference between rural and urban with reference to intelligence.

EDUCATIONAL IMPLICATIONS

The most outstanding characteristics of any research is that it must contribute something new to the development of the area concerned. So the investigator has to field out the educational implications of the study.

Creativity is one of asset of human mankind. Therefore parents and teachers should help their children for developing creativity among children. Parents and teachers should create such an unthreatening environment in which children can express themselves freely and in term be developed their creative thinking. This study is also helpful for the children in selection of their subjects as per their vocational interests.
REFERENCES


