A Comparative Study on Intelligence of Class X Students of Tribal and Non-Tribal Students in Lakhimpur District, Assam

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Abstract: The present study deals with the intelligence of class X students of Tribal and Non-Tribal Students in Lakhimpur district, Assam. The sample consisted of 200 students (100 Tribal and 100 Non-Tribal), Group Test of Mental Ability by Dr. S. Jalota (1976) was used to find out intelligence of students. The main finding of the study was that there is true difference between the students of tribal and non-tribal on intelligence; and there is no significant difference between rural/urban and male/female students on intelligence.

Keywords: Intelligence, Tribal and Non-Tribal

1. Introduction

Intelligence is the power or faculty which helps us in understanding thinking and reasoning about things or people. Intelligence is the only word which makes the human being different from animals. God has equipped man with certain cognitive abilities by which he becomes a rational being. David Wechsler (1958) said, “Intelligence is the aggregates of global capacity of an individual to act purposefully, to think rationally and to deal effectively with his environment.” Our learning and thinking are possible through intelligence. It is an organization comprising the abilities of readiness, correctness and of understanding complicated and abstract things and with its help a person shows necessary mental control and action in solving problems. Intelligence is a term describing one or more capacities of the mind. In different context, the term intelligence can be defined in different ways, including the capacities for abstract thinking, understanding, communication, reasoning, learning, planning, emotional intelligence and problem solving. Intelligence is most widely studied in human being, but it is also observed in animals and plants as well.

2. Review of Related Literature

Cukierkorn, Jesse Rachel (2007) made a study on self-concept and intelligence of talented students in the visual and performing arts. This study was conducted to investigate self-concept and intelligence among artistically talented high school students attending an arts conservative instructional centre for the visual and performing arts. Further, the unique relationships between artistic talent, intelligence, and self-concept were explored. Two hundred and seventy-two students in grades nine through 12 were assessed for intelligence using the Ravens Standard Progressive Matrices (SPM) (Raven, Raven, & Court, 2000), multi-faceted self-concept using the Self-Description Questionnaire II (Marsh (1990), and self-concept in the arts using the Arts Self Perception Inventory (Vispoel, 1993). The young creative writers, dancers, media artists, musicians, theatre artists, and visual artists all scored higher than average on all of the self-concept scales. Approximately 18% scored at the 90th percentile or above on the Raven’s SPM. Both positive and negative relationships were found between self-concept and intelligence. Although results indicated that artistic domain did not make a significant difference in intelligence score, those who scored the highest on self-concept in visual art were the visual artists and the media artists, and self-concept in visual art skill positively predicted high intelligence. Significant differences were found among the self-concept scores in the various artistic domains.

Dutta Jadab, Chetia, Pranab and Soni, J.C (2015) conducted a study on “A Comparative Study on Intelligence of Secondary School Students in Lakhimpur District of Assam”. This study is conducted on a sample of 500 Students comprised of 250 boys and 250 girls selected randomly from 16 Government and Private secondary schools of Lakhimpur district of Assam. The descriptive survey method is used for data collection using group test of mental ability was constructed and standardized by Dr. S. Jalota. The findings of the study reported that there are no difference on intelligence in respect of male and females of private and rural male/female private secondary school students. But it reported real difference in overall between government and urban private secondary school students.

Dutta Jadab, Rajknower, Suresh and Soni, J.C (2015) conducted a study on “A Comparative Study on Intelligence of Secondary School Students in Lakhimpur and Sonitpur Districts of Assam”. This study is conducted on a sample of 1000 Students of comprised 500 boys and 500 girls selected randomly from 32 Government and Private secondary schools of both districts of Assam. The descriptive survey method is used for data collection using group test of mental ability was constructed and standardized by Dr. S. Jalota. The study showed that there are major differences in the intelligence of secondary school students of both districts whether they belong to government and private male/female and urban male and female private students. This study also showed that there is a no difference between rural and urban govt., male/female; govt., male/female of rural; male/female of urban; male/female of private and rural male and female of private secondary students of both the districts on intelligence.
The present study was conducted on the Intelligence of Class X Students of Tribal and Non-Tribal Students in Lakhimpur District, Assam. Intelligence is a vital factor in related to academic achievement. It may be explained as the capacity for knowledge and understanding, especially as applied to the handling of novel situation; the power of meeting novel situation successfully by adjusting behaviour to the total situation. It is an organization comprising of the abilities to readily, correctly, understand the complicated and abstract things. It is an inborn natural power that makes a man capable of overcoming difficulties and problems of life.

Hypotheses of the study
On the basis of above objectives following hypotheses were formulated:
• There is no significant difference between the mean scores on intelligence of tribal and non-tribal students.
• There is no significant difference between the mean scores on intelligence of tribal and non-tribal rural and urban school students.
• There is no significant difference between the mean scores of tribal and non-tribal male and female students on intelligence.

Method of the Study
Descriptive survey method was used for the present study.

Population of the Study
The population of the present study constitutes tribal and non-tribal school students studying in class X of Lakhimpur district, Assam.

Sample of the Study
The sample of the study was taken through simple random sampling technique. The sample consisted of 200 students (100 Tribal and 100 Non-Tribal) from Lakhimpur district, Assam.

Tool of the Study
Group Test of Mental Ability developed by Dr. S. Jalota (1976). It has 100 types multiple choice questions employing various types of sub-tests.

Collection of Data
The investigator personally went to the school for administration of the test.

Statistical Analysis
The data are analyzed with the help of Mean, Standard Deviation and t-test.

Analysis and Interpretation of Data
The data were analyzed on the basis of academic achievement and intelligence.

Hypothesis 1: There is no significant difference between the mean scores on intelligence of tribal and non-tribal students.
Table 1: Mean, SD and t-value of Tribal and Non-Tribal students.

<table>
<thead>
<tr>
<th>Intelligence</th>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>t-value</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tribal</td>
<td>100</td>
<td>58.82</td>
<td>11.07</td>
<td>11.26</td>
<td>Significant</td>
</tr>
<tr>
<td></td>
<td>Non-Tribal</td>
<td>100</td>
<td>73.35</td>
<td>6.56</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From Table 1 and Graph 1 showing the mean value of tribal students on intelligence is 58.82, which is lower than that of non-tribal students, i.e. 73.35. The SD values are found 11.07 and 6.56 respectively. When the significance of difference between mean is computed, the t-value is found 11.26 which is significant at 0.05 level of significance. Thus, the result indicates that the intelligence of non-tribal students scored significantly higher than intelligence of tribal students. Hence, hypothesis is rejected.

Hypothesis 2: There is no significant difference between the intelligence of tribal and non-tribal rural and urban school students.

Graph 2: Showing the mean and standard deviation on intelligence of rural and urban students

Table 2: Mean, SD and t-value of tribal and non-tribal rural and urban students

<table>
<thead>
<tr>
<th>Intelligence</th>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>t-value</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rural</td>
<td>100</td>
<td>64.7</td>
<td>12.23</td>
<td>1.69</td>
<td>Not Significant</td>
</tr>
<tr>
<td></td>
<td>Urban</td>
<td>100</td>
<td>67.47</td>
<td>10.89</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From the above Table 2 and Graph 2 it is found that the mean score of rural students on intelligence is 64.7 and SD is 12.23. The mean score of urban students on intelligence is 67.47 and SD is 10.89. The t-value between rural and urban students on intelligence is 1.69, which is not significant at 0.05 level of significance. Hence, hypothesis is accepted. It means that there is no significant difference between the mean scores of rural and urban students on intelligence.

Hypothesis 3: There is no significant difference between the mean scores of tribal and non-tribal male and female students on intelligence.

Graph 3: Showing the mean and standard deviation on intelligence of tribal and non-tribal male and female students

Table 3: Mean, SD and t-value of Tribal and Non-Tribal male and female students

<table>
<thead>
<tr>
<th>Intelligence</th>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>t-value</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>100</td>
<td>64.96</td>
<td>11.63</td>
<td>1.37</td>
<td>Not Significant</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>100</td>
<td>67.21</td>
<td>11.59</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
It is found that the mean value of male students on intelligence is 64.96 and that of female students on intelligence is 67.21. The computed t-value is 1.37 which is less than the table value. The mean difference is found to be not significant at 0.05 level. So, the hypothesis is accepted. It reveals that there is no significant difference between the mean scores of male and female students on intelligence.

4. Findings of the Study

After statistical analysis of the data, the researcher arrived at the following findings.

i) There is true difference between the students of tribal and non-tribal on intelligence.

ii) There is no significant difference between rural and urban students on intelligence.

iii) There is no significant difference between male and female students on intelligence.

References