

## IMPACT OF INTELLIGENCE ON ACADEMIC ACHIEVEMENT OF SCHEDULED TRIBE STUDENTS OF CLASS X OF KAMRUP (RURAL) DISTRICT, ASSAM

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### **ABSTRACT**

*Academic achievement of the students is greatly influenced by their intelligence. The present study has been conducted to study the impact of intelligence on academic achievement of scheduled tribe students of class X of Kamrup (Rural) District, Assam. An incidental sample of 167 students belonging to scheduled tribe category is selected from secondary schools of Kamrup (Rural) District, Assam. In the present study, Group Test of Intelligence (G.G.T.I) developed by G.C. Ahuja is used for collection of data. In order to analyze the collected data, the investigator used statistical techniques such as- Pearson's Coefficient of Correlation and 't' test. The result of the present study shows that there is a significant relationship between intelligence and academic achievement of Scheduled Tribe students of class X of Kamrup (Rural) District, Assam.*

**Keywords:** *Intelligence, Academic achievement, Scheduled Tribe Students.*

### **1.0 INTRODUCTION**

Academic achievement plays an important role in harmonious development of the students which refers to the level of success attained by the students in the scholastic or academic work or in the curricular subjects prescribed within the syllabus, in brief, academic achievement is the amount of information, knowledge, understanding and skills derived from their classrooms. Academic achievement of the students is influenced by several factors including- family, school, peer group, school environment, intelligence and socio-economic status etc.

## 1.1 SCHEDULED TRIBES (ST)

The Scheduled Tribe (ST) is an official designation given to various groups of historically disadvantaged indigenous people in India. The term 'Scheduled Tribe' is recognized in the Constitution of India and the various groups are designated in one or other of the categories. The Scheduled Tribes comprise about 8.6 percent of India's population as per the census of 2011. The Constitution (Scheduled Tribes) Order, 1950 lists 744 tribes across 22 states in its First Schedule.

In Assam, there are many Scheduled tribes (STs), they are- Boro, Rabha, Dimasa, Tiwa, Soronia Kachari, Deori, Sonowal Kachari, Mech, Miching, Karbi, Singpho, Khampti, Garo, Chakma, Hajong, Barmans in Cachar, Hmar, Kuki Tribes, Naga Tribes, Pawi, Syntheng, etc.

## 1.2 KAMRUP DISTRICT OF ASSAM

Kamrup is one of the districts of Indian state of Assam which has two Civil Sub-Divisions namely- Kamrup Sadar Sub-Division and Rangia Sub-Division. Rangia is a city and a sub-division of Kamrup district of Assam. It is situated 52 kilometers away from the state headquarters Guwahati.

## 2.0. REVIEW OF RELATED LITERATURE

**Lamare, R. (2010)** conducted study on "A Study of Academic Achievement in Relation to Some Psycho-Social Variables of Secondary School Students in East Khasi Hills District, Meghalaya". This study revealed that intelligence and academic achievement were positively correlated; there was a great influence of socio-economic background on academic achievement; and non-tribal students were significantly better in their achievement than the tribal students both in case of average and low achievers.

**Dhull, J. (2012)** studied on "A Comparative Study of the Achievement in Science in Relation to Intelligence, Academic Anxiety and Reading Interest of the X Class Students in Government and Private Schools of Haryana" and the result of this study revealed that there was no significant difference between Academic Anxiety of the students of class X in Government and Private Schools; the government school students had less academic anxiety in comparison to private school students; there was significant difference between Intelligence of the students of class X in Government and Private Schools; and Reading Interests had also significant relationship with achievement in science.

**Sivakumar, N. (2012)** conducted a study on “A Study of Some Selected Psycho-Social Variables Related to Educational Achievement of Scheduled Tribe Students in Shervarayan Hill Range, Tamil Nadu” and it attempted to find out the difference among Scheduled Tribe boys and Scheduled Tribe girls in their educational achievement. The study indicated that Scheduled Tribe boys and girls did not differ in their educational achievement.

**Chandra, R. and Azimmudin, S. (2013)** conducted a study on “Influence of Intelligence and Gender on Academic Achievement of Secondary School Students of Lucknow City”. The result of this study revealed that there was no influence of gender on academic achievement; and intelligence influenced the academic achievement of the students, the child with High IQ had better academic achievement than the child with Average IQ.

It is clear that few studies have been conducted on academic achievement of Scheduled Tribe students in relation to intelligence yet, it stimulates to be studied.

### **3.0. STATEMENT OF THE PROBLEM**

The present problem has been stated as “**Impact of Intelligence on Academic Achievement of Scheduled Tribe Students of Class X of Kamrup(Rural)District, Assam**”.

### **3.1 OPERATIONAL DEFINITIONS:**

#### **a) ACADEMIC ACHIEVEMENT**

John Bellingham in his ‘Dictionary of Education’ defines academic achievement as “a measure of knowledge gained in formal education usually indicated by test scores, grade points, averages, and degrees.”

In the present study, academic achievement refers to the percentage of marks obtained in aggregate by the Scheduled Tribe students of secondary schools (i.e. class X) of Kamrup (Rural) District, Assam in the Final Examination of class IX held in 2017.

#### **b) INTELLIGENCE**

Stern says “Intelligence is a general capacity of an individual consciously to adjust his thinking to new requirements. It is general mental adaptability to new problems and conditions of life”.

In the present study, intelligence refers to the general mental ability of the Scheduled Tribe students of class X of Kamrup (Rural) district of Assam and it is interpreted as the score obtained in the Group Test of Intelligence developed by Dr. G.C. Ahuja.

### c) SCHEDULED TRIBE STUDENTS

The Scheduled Tribe is an official designation given to various groups of historically disadvantaged indigenous people in India. In a more restricted sense, the term 'tribe' refers to a group of people, usually under a chief and maintaining distinct cultural traits. In the broadest sense, the word 'tribe' means an aggregate of people sharing common descent, dialect, territory and culture.

In the present study, the scheduled tribe students refers to those students studying in class X of Kamrup (Rural) district of Assam which includes Boro, Soronia Kachari, and Rabha students.

## 4.0 SIGNIFICANCE OF THE STUDY

Good academic achievement of the students is the main responsibility of schools or any other educational institutions to promote their whole scholastic growth and development. Academic achievement of the students depends upon their intelligence. Lamare (2010), Chandra and Azimmudin (2013) revealed that intelligence and academic achievement were positively correlated. Dhull (2012) found that there was significant difference between Intelligence of the students of class X in Government and Private Schools. Sivakumar (2012) indicated that Scheduled Tribe boys and girls did not differ in their educational achievement. On the basis of these results, the investigator has attempted to study on the impact of intelligence on academic achievement of scheduled tribe students studying in secondary schools. It is expected that the findings of present study might help the parents and teachers in creating conducive environment for the high academic achievement of the pupils.

## 5.0 OBJECTIVES OF THE PRESENT STUDY

The following objectives have been formulated in the present study:

1. To study the relationship between intelligence and academic achievement of Scheduled Tribe students of class X of Kamrup (Rural) District, Assam.
2. To compare the intelligence between male and female Scheduled Tribe students of class X of Kamrup (Rural) District, Assam.

3. To compare the intelligence between urban and rural Scheduled Tribe students of class X of Kamrup (Rural) District, Assam.

## 6.0 HYPOTHESES OF THE PRESENT STUDY

The following are the null hypotheses of the present study:

- H<sub>01</sub>:** There is no significant relationship between intelligence and academic achievement of Scheduled Tribe students of class X of Kamrup (Rural) District, Assam.
- H<sub>02</sub>:** There is no significant difference between male and female Scheduled Tribe students of class X of Kamrup (Rural) District, Assam in relation to intelligence.
- H<sub>03</sub>:** There is no significant difference between urban and rural Scheduled Tribe students of class X of Kamrup (Rural) District, Assam with respect to intelligence.

## 7.0 DELIMITATIONS OF THE PRESENT STUDY

1. The present study has been delimited to the scheduled tribe students studying in class X belonging to Provincialized and Private secondary schools under Board of Secondary Education, Assam (S.E.B.A.) of Kamrup (Rural) District, Assam.
2. The present study has been delimited to secondary schools of Rangia Sub-division of Kamrup (Rural) District, Assam.
3. This study has been delimited to the students belonging to Scheduled Tribes Plain only.

## 8.0 METHODOLOGY

### 8.1 METHOD

In the present study, Descriptive or Survey method is adopted by the investigator.

### 8.2 POPULATION OF THE PRESENT STUDY

For the present study, the population is consisted of all the scheduled tribe students studying in class X of Kamrup (Rural) District, Assam.

### 8.3 SAMPLE OF THE PRESENT STUDY

In the present study, purposive sampling technique is adopted for selecting the schools and incidental sampling technique is used for selecting the student sample. In the present study, the sample is consisted of 167 scheduled tribe students of class X studying in the ten (10) secondary schools of Kamrup (Rural) district of Assam.

### 8.4 TOOLS USED

In the present study, the two (2) different tools are used for collecting data and information such as G.C. Ahuja's Group Test of Intelligence (G.G.T.I) and Academic Achievement Score. Here, academic achievement score refers to the percentage of marks obtained in aggregate by the Scheduled Tribe students of secondary schools (i.e. class X) of Kamrup (Rural) District, Assam in the Final Examination of class IX held in 2017.

### 8.5 STATISTICAL TECHNIQUES USED

The investigator used statistical techniques to analyze the collected data such as- Pearson's Co-efficient of Correlation and 't' test.

## 9.0 ANALYSIS AND INTERPRETATION OF DATA

9.1 **Objective 1:** To study the relationship between intelligence and academic achievement of Scheduled Tribe students of class X of Kamrup (Rural) District, Assam.

**H<sub>0</sub>1:** There is no significant relationship between intelligence and academic achievement of Scheduled Tribe students of class X of Kamrup (Rural) District, Assam.

**Table-1 shows 'r' Value and Level of Significance between Intelligence and Academic Achievement of Scheduled Tribe Students**

SAMPLE	N	VARIABLES	df	'r' VALUE	LEVEL OF SIGNIFICANCE
ST STUDENTS	167	INTELLIGENCE	165	0.57	Significant at 0.05 level
		ACADEMIC ACHIEVEMENT			

Table-1 shows that it is a positive and marked relationship between intelligence and academic achievement of Scheduled Tribe students of class X of Kamrup (Rural) District, Assam. Again, it indicates that the 'r' value ( $r=0.57$ ) with df 165 is more than the Table value (.159 at 0.05 level of significance). Hence, null hypothesis is rejected; therefore, it is significant at 0.05 level. Thus, it may be inferred that there is a significant relationship between intelligence and academic achievement of Scheduled Tribe students of class X of Kamrup (Rural) District, Assam.

**9.2 Objective 2:** To compare the intelligence between male and female Scheduled Tribe students of class X of Kamrup (Rural) District, Assam.

**H<sub>0</sub>2:** There is no significant difference between male and female Scheduled Tribe students of class X of Kamrup (Rural) District, Assam in relation to intelligence.

**Table-2 shows 't' Ratio and Significance Level of Intelligence between Male and Female Scheduled Tribe Students**

GROUP	N	MEAN	SD	SE <sub>D</sub>	df	't' VALUE	LEVEL OF SIGNIFICANCE
MALE	77	47.93	18.32	2.81	165	1.63	Not significant at 0.05 level
FEMALE	90	43.34	17.91				

The table-2 reveals that the 't' value ( $t=1.63$ ) with df 165 is smaller than the Table value (1.98 at 0.05 level of significance). Hence, null hypothesis is accepted; therefore, it is not significant at 0.05 level. Thus, the result reveals that there is no significant difference between male and female Scheduled Tribe students of class X of Kamrup (Rural) District, Assam in relation to intelligence.

**9.3 Objective 3:** To compare the intelligence between urban and rural Scheduled Tribe students of class X of Kamrup (Rural) District, Assam.

**H<sub>0</sub>3:** There is no significant difference between urban and rural Scheduled Tribe students of class X of Kamrup (Rural) District, Assam with respect to intelligence.

**Table-3 shows ‘t’ Ratio and Significance Level of Intelligence between Urban and Rural Scheduled Tribe Students**

GROUP	N	MEAN	SD	SE <sub>D</sub>	‘t’ VALUE	df	LEVEL OF SIGNIFICANCE
URBAN	64	59.42	17.04	2.48	8.77	165	Significant at 0.05 level
RURAL	103	37.66	13.14				

The table-3 shows that the ‘t’ value ( $t=8.77$ ) with df 165 is higher than the Table value (1.98 at 0.05 level of significance). Hence, null hypothesis is rejected; therefore, it is significant at 0.05 level. Thus, the result shows that there is a significant difference between urban and rural Scheduled Tribe students of class X of Kamrup (Rural) District, Assam with respect to intelligence.

## 10.0 MAJOR FINDINGS

- 10.1.** There is a significant relationship between intelligence and academic achievement of Scheduled Tribe students of class X of Kamrup (Rural) District, Assam.
- 10.2.** There is no significant difference between male and female Scheduled Tribe students of class X of Kamrup (Rural) District, Assam in relation to intelligence.
- 10.3.** There is a significant difference between urban and rural Scheduled Tribe students of class X of Kamrup (Rural) District, Assam with respect to intelligence.

## 11.0 CONCLUSION

Every child is born with physical and mental abilities which are distinctly separate to each other. So, education should be designed to help in the highest development of all inborn qualities and potentials of an individual. The main aim of education is to develop the highest potentialities of an individual and to remove obstacles in the path of individual development. In this regard, the parents as well as school teachers have also the responsibilities to the scholastic achievement of their children. The children should be provided proper facilities and freedom, so that they can develop their total aspects of personality and express inner talents themselves.



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