



Reflection of Reasoning Ability on Academic Performance of Tribal Students at Secondary level in Tripura

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Abstract

The present study explores the reasoning ability of tribal student's and their academic achievement at the secondary level in Unakoti Tripura district. The secondary school students of Unakoti Tripura those who are studying in class IX and X of different Govt. school these all students are taken as the population of this study. The present study was conducted on 220 tribal students, out of 220 students 110 were boys and 110 were girl's students. Simple random sampling technique was used for the data collection. The 'Reasoning Ability Test' developed by Dr. Mehraj Ahmad Bhat and Dr. Punita Govil was used in this study. Collected data was analyzed by using various inferential statistical, these statistics are Mean, Stander Deviation, t- test, Prarson's Correlation. The result of the study revealed that majority of the students are having average level of reasoning ability while very few were found to have very low and very high in reasoning ability. While correlation was done in between reasoning ability and academic achievement, it was found to have a high correlation. The result also indicated that the female are more able to carry out reasoning activities than that of male. Regard to academic achievement it was found that majority of the respondents were fallen under average level. In this study some implication for future also outlined.

Keyword: Reasoning Ability, Academic Performance, Tribal Students, Secondary Level Students.

Introduction

We all know that every child comes into this world with some special qualities. The main aim of education is overall development of these all special quality. The reasoning ability is also included in this special quality. Reasoning ability is an important element of our life it also helps us to solve day to day problems as well as our decision and our activity are based on our reasoning ability. Those who are have more reasoning ability they can solve any problem easily in their life. So, we can say that reasoning ability is a one of the part of intelligence. For today's world reasoning ability is essential for everyone because it's a problem solving skill. So, it's required for everybody. Without reasoning we can't applied our past knowledge and experience to new situation.

Reasoning skills are recognized as a key of ability to create, learn, and apply knowledge. The significance of reasoning skills is the great concern in educational life and in the work life. Such kinds of challenges develop the power of reasoning ability by lifelong learning and help to build a rational developed world.

India has a various caste native citizen. The scheduled Tribes one of the most economically impoverished people of India. Total population of Tripura is 3671032 according to 2011 census, Tripura has 20.45% tribal population in between 56715 Scheduled Tribe (ST) live South Tripura, according to 2011 census (Source: tripuratourism.gov.in). Tripuri, Debbarma, Jamatia, Mog, Reang, Chakma, Noatia, Kuki, Uchoi, Lushai, Garo, Munda, Santal, Orang, Santal etc. group of tribes are live in Tripura.

Academic performance means knowledge, understanding or skill acquired after completing the courses or subjects. This is usually measured by the total marks of students in a particular class. Academic performance depends on various factors that directly or indirectly influence students. Therefore, academic performance is considered as an essential part of Education. Academic performance is the most important factor in today's society.

Many students of Tripura pass the secondary level exams each year with well percentage mark, when they are confront comparative or logical exam, it is not possible for all of them to perform well. However the question arises as to whether there is a relationship in between the power of reasoning & academic performance, if so, what kind of relationship exist.

Need and Significance of the study

The person who has the reasoning ability or logical ability to deeply understand the cause and effect relationship is the person too he can easily solve many problems in his or her life. But at present reasoning ability is essential for every student. The reasoning ability is not only for the student to pass a academic exam or competitive exam but also to use his acquired knowledge and experience in new situations. The reasoning ability is very easy to solve various problems of life and society required.

Our current study is 'Reflection of reasoning ability on academic performance of tribal students at secondary level in Tripura'. We know that indigenous communities are mostly in the hilly areas of our state of Tripura. However, we also know that most of the hilly areas are underdeveloped because despite the efforts of the government in the hilly areas, development fails due to various geographical adversities. As a result, there are disadvantages to improved education systems. However, there is a special need for education and reasoning skills for the students of this region through which they can solve the problems of their daily life as well as improve their quality of life by passing competitive exams. The power of reasoning ability helps students to develop positive behaviors in a variety of situations. This reasoning ability will help to students make different decisions in academic life. However, in order to develop proper reasoning ability, school teachers need to create a helpful environment for students and use appropriate methods to pave the way for students to develop reasoning ability.

Objectives of the Study

1. To find out the reasoning ability of tribal students at secondary level in Unakoti Tripura.
2. To find out the academic performance of tribal students at secondary level in Unakoti Tripura.
3. To find out the relationship between reasoning ability and academic performance at secondary level tribal students in Unakoti Tripura.
4. To compare the differences between reasoning ability of tribal students in respect to their gender.

Hypothesis of the study

H₀₁: There exists no considerable association between reasoning ability and academic performance at secondary level tribal students in Unakoti Tripura.

H₀₂: There exists no considerable difference between reasoning ability of tribal students in respect to their gender.

Methodology

In this present study, descriptive design was used. The secondary school students of Unakoti Tripura those who are studying in class ix and x of different Govt. school these all students are taken as the population of the present study. Simple random sampling technique were applied in this present study. The researchers conduct 220 students from different secondary schools of Unakoti Tripura.

Sample and Sampling

As sample of 220 secondary students both from the Bengali and English medium schools are selected. In between these 110 female and 110 male students were selected as a sample. In this study 11 secondary school were randomly selected from Unakoti Tripura.

Tools used

The 'Reasoning Ability Test' developed by Dr. Mehraj Ahmad Bhat and Dr. Punita Govil, A.P, Dept. of Education, Aligarh Muslim University were used in this present study.

Procedures of data Analysis

In this present study various techniques were used for the purpose of hypothesis testing such as mean, percentile and standard deviation, Pearson's correlation these all statistics are used for data analysis.

Result and Discussion

Objective -1: To find out the reasoning ability of tribal students at secondary level in Unakoti Tripura.

Table No.-1

Level of reasoning ability of secondary level tribal students

Score Range	N	Percentage	Category
Above 28	6	2.73	Very High Reasoning Ability
23-28	55	25	High Reasoning Ability
17-22	83	37.73	Average Reasoning Ability
11-16	61	27.73	Low Reasoning Ability
0-10	15	6.81	Very low reasoning Ability
Total	220	100	-----

On the table number- 1 the researcher found that the reasoning ability of tribal students of Unakoti Tripura is most of the students fall under average reasoning ability and the result of 220 tribal students reasoning ability at secondary level it was observed that only 6 students fall under very high reasoning ability, 55 students is in high reasoning ability, 83 students is in average reasoning ability, 61 students is in low reasoning ability and 15 students is in very low reasoning ability.

Objective -2: To find out the academic performance of tribal students at secondary level in Unakoti Tripura.

Table No. -2

Status of academic performance.

Score Range	Number of students	Category
Above 306	45	High Academic Performance
202 - 306	129	Average Academic Performance
Below 202	46	Low Academic Performance
Total	220	-----

In this table number -2, it was found that most of the students fall under average level. The result of 220 tribal students academic performance it was observed that 45 students fall under high level of academic performance, 129 students fall under average level of academic performance and 46 students fall under low academic performance. So, on the basis of result researcher can say that the level of academic performance of tribal students at secondary school level of Unakoti Tripura is average.

Objective -3: To find out the relationship between reasoning ability and academic performance at secondary level tribal students in Unakoti Tripura.

H0₁: There exists no considerable association between reasoning ability and academic performance of secondary level tribal students in Unakoti Tripura.

Table No. - 3

Variable	N	r- value	df	Level of Significance	Remark
Reasoning Ability	220	0.79	218	0.01	Significant and there exists High Correlation
Academic Performance					

Result in the table - 3 shown that the calculate 'r' value calculated through utilizing Pearson's Product Moment method was 0.79 which can be categorically taken as high correlation and the result was statistically significant at 0.01 level with 218 degrees of freedom. Therefore, the null hypothesis "There exists no considerable association between reasoning ability and academic performance of secondary level tribal students in Unakoti Tripura." is rejected. So it can be concluded that academic performance and reasoning ability of the students is related.

Objective -4: To compare the differences between reasoning ability of tribal students in respect to their gender.

H0₂: There exists no considerable difference between reasoning ability of tribal students in respect to their gender.

Table No. - 4

Sl. No.	Category	N	Mean	SD	D	df	't' value	Level of Significance
1	Male	110	17.71	5.19	1.93	218	2.67	0.01
2	Female	110	19.64	5.52				Significant

On the table - 4 shown that the male student respondents the mean of the scores in reasoning ability was 17.71 and the female respondents was 19.64. In the case of male students respondents the S.D of the scores in reasoning ability of tribal students was 5.19 and in the case of female student's respondents the S.D of the scores in reasoning ability of tribal students was 5.52. The male student's respondents are 110 and the female student's respondents are 110. The 't' ratio in respect of the two means was 2.67 which is significant at 0.01 level with 218 df. Therefore, the null hypothesis "There exists no considerable difference between reasoning ability of tribal students in respect to their gender." is not accepted. Therefore

it can be finalized that the reasoning power of both the gender male and female is not same and their reasoning ability is different.

Conclusion

Based on analysis and results the researcher found that the result of tribal students of Unakoti Tripura is most of the students fall under average reasoning ability and the result of 220 tribal students reasoning ability at secondary level it was observed that only 6 students fall under very high reasoning ability, 55 students is in high reasoning ability, 83 students is in average reasoning ability, 61 students is in low reasoning ability and 15 students is in very low reasoning ability.

The level of academic performance of male tribal student is out of 220 tribal students academic performance it was observed that 45 students fall under high level of academic performance, 129 students fall under average level of academic performance and 46 students fall under low academic performance. The two variables were compared using the Pearson's correlation existed. The relationship between the power of reasoning and academic performance of tribal students at secondary level was $r = 0.79$. The correlation coefficient, indicate the relationship between two variables and can range from ± 0.71 to ± 1.90 (Source: S.K. Mangal, Statistics in Psychology and Education. Second edition).

While comparing the male and female student's reasoning ability it was found that the 't' ratio in respect of the two means was 3.30 which is significant at 0.01 level with 218 df. So, there is significantly different between reasoning ability in male and female students. Based on these results, researchers can say that female tribal students are more capable of reasoning ability than male tribal students.

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