Intelligence And Achievement of Tribal and Non-Tribal Students in the Nilgiris District of Tamil Nadu, India

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ABSTRACT *Tribal education has always been a high priority for the Tamil Nadu State Government in India. Consistent efforts are made to give quality education to the tribal children by state and central government. But, the ultimate goal is not yet reached and several factors obscure the real problem in the tribal education. First and foremost thing is that the children should be properly understood by the teachers and administrators. Scientific diagnosis is most warranted and systematic research is very much needed to understand the academic achievement and intelligence of the tribal children. It is found from this study that academic achievement of the tribal children is similar as like their counterparts belongs to non-trial community. Whereas the intelligence of the non-tribal children are more than the tribal children. The correlation study shows the strong positive relationship between intelligence and academic achievement of tribal and non-tribal children.*

INTRODUCTION

Tribal education has always been a high priority for the Tamil Nadu State Government in India. The Nilgiris is the home for six primitive tribal groups – the Todas, Kotas, Kurumbas, Irulas, Paniyans and Kattunaickens. In the Nilgiris district, the Adi Dravidar and Tribal Welfare department, Udhagamandalam, is responsible for Government Tribal Residential schools where formal education is imparted to the tribal children.

As per 2011 census, the literacy level of Scheduled Castes and Scheduled Tribes stood at 53.01 percent and 32.78 percent respectively as against the general literacy level of 80.09 percent, in Tamil Nadu (www.census2011.co.in/states.php). This low literacy levels among tribal students is an area of concern that requires investigation. The investigator's personal experiences as a Post Graduate teacher in the Nilgiris for 25 years, tribal children are endowed but ignored due to many reasons. Therefore, scientific investigation is most warranted in this aspect.

TRIBES OF THE NILGIRI DISTRICTS

"The Nilgiris District also called 'The Nilgiri Hills' is one of the smallest districts in the state of Tamil Nadu, India. Etymologically, the word Nilgiris means 'Blue Mountains'. The district is a hilly area of 2549.0 sq.kms located between 11° 10' and 11°30' N latitude and between 76° 25' and 77° 00' longitudes at the junction on the Eastern and Western Ghats, the two prominent mountain ranges of peninsular India". (Parthasarathy,2007,p.89)

"The tribal groups constitute 1% of the total population in the state of Tamil Nadu, in India. 36 out of the 461 tribal groups in the country are in Tamil Nadu. Every year, under tribal development plans, special provisions are being made for the educational development of scheduled tribes" (Parthasarathy, 2007, p.4).

CULTURAL BACKGROUND OF THE TRIBES

The tribal people belonging to the Nilgiris District are considered to be friends of wild life or guardians of nature. They perform unique cultural practices during death ritu-

als which are different from the non-tribal people. Strict taboos and rituals are observed during death. Funeral rites are elaborate and they spend most of their money for these rituals. They worship ancestral spirits and tribal deities. They encourage cross cousin marriages. They earn their living by being laborers on tea estates. Most of them are poor in comparison with the non-tribals. Most of the girl students drop out from schools at an early age to look after their siblings while their parents go for work. All these practices make them different from the non-tribal people (Parthasarathy, 2007, p.91)

STATEMENT OF THE PROBLEM

The investigators have taken up the research problem entitled "INTELLIGENCE AND ACHIEVEMENT OF TRIBAL AND NON-TRIBAL STUDENTS IN THE NILGIRIS DISTRICT OF TAMIL NADU" for this study.

DEFINITIONS OF INTELLIGENCE

According to Gardner (1983, pp.3-8), "intelligence is the ability to create an effective product or offer a service that is valued in a culture; set of skills that make it possible for a person to solve problems in life; and the potential for finding or creating solutions for problems, which involves gathering new knowledge". Intelligence is also defined as "the mental activity directed towards purposive adaptation to, selection and shaping of, real world environments relevant to one's life" (Sternberg,1985, pp.3-16). In this study the investigators used standardized intelligence test for assessing the intelligence of the tribal and non-tribal children.

DEFINITIONS OF ACHIEVEMENT

Travers (1970, p.447) states that "achievement is the result of what an individual has learned from some educational experience". According to De Cecco, Crawford and William (1977, p.301), "achievement is the expectancy of finding satisfaction in mastering challenging and difficult performances". Furthermore, Tinambunan (1988, p.149) defines achievement as "the student's grasp of some body of knowledge or proficiency in certain skills". Garrison, Kingston and Mc Donald (1964, p.331) defines achieve-

ment as "the progress pupils make towards the goals and objectives of the curriculum"; they then assert further about the definition that "achievement may be one's ability or the extent of his or her knowledge in a specific content area". According to Heacox (1991, p.46), "if, however, students believe they are capable, and expect positive results for their efforts, then they will become achievers". In this study the achievement test scores secured by the tribal and non-trial students in their school examinations were considered for analysis.

OBJECTIVES OF THE STUDY
The following are the objectives of the study

- To study the academic achievement and intelligence of the tribal and non-tribal at the high school level.
- To study the significant difference, if any, in the academic achievement and intelligence of the tribal and non-tribal students at the high school level.
- To study the significant difference, if any, in the intelligence between boys and girls among the tribal and non-tribal students in the different standards (6th, 7th, 8th and 9th) at the high school level.
- To study the significant difference, if any, in the academic achievement between boys and girls among the tribal and non-tribal students at the high school level.
- To study the significant relationship, if any, between academic achievement and intelligence of the students of tribal and non-tribal students at higher secondary level.

HYPOTHESES
- There is a significant difference in academic Achievement between the tribal and non-tribal students at the high school level.
- There is a significant difference in intelligence between tribal and non- tribal Students in the different standards (6th, 7th, 8th and 9th) at the high school level.
- There is a significant difference in academic achievement between tribal boys and girls .
- There is a significant difference in intelligence between non- tribal boys and girls .
- There is a significant relationship between academic achievement and intelligence of the tribal students at high school level
- There is a significant relationship between academic achievement and intelligence of the non-tribal students at high school level

POPULATION AND SAMPLE
The population for the present study consists of the students in the 25 Government Tribal Residential Schools in the Nilgiris district which includes 12 primary schools, 10 middle schools, 2 high schools and 1 higher secondary school. There were 2720 students were studied in these 25 schools.

SAMPLING TECHNIQUE
The Simple Random Sampling method was applied to select the 6 Government Tribal Schools from the Nilgiris district. All the tribal students from Stds.VI to IX studying in these schools were purposively selected as sample for the investigation. Similarly, 4 Aided Schools were randomly selected from the Nilgiris district for selecting the non-tribal students. Therefore, 587 tribal and 479 non-tribal students were selected as sample for this study. The following table-2 and 3 show the sample distribution of tribal and non-

tribal students considered for the present study.

METHODOLOGY
Academic achievement test scores of 479 non tribal students (279 Boys and 200 Girls) from Std VI to Std IX were collected for 3 terms, from four different aided schools in Coonoor, Nilgiris district. Similarly the achievement scores of 587 tribal students (322 boys and 265 girls) from Std VI to Std IX, belonging to Irula, Kurumba and Paniyan tribes, were collected from six different government tribal residential schools in the Nilgiris district.

Followed by the academic achievement score collection, Standardized Raven's Progressive Matrices test for intelligence was administered to the students from Std VI to IX in tribal and non-tribal schools. The scoring was done with the help of a standard scoring key for RPM tests.

RESULT AND DISCUSSION
In Inferential Analysis, the t-test was used to find the significant difference between genders in academic achievement and intelligence. To find the significant relationship if any between academic achievement and intelligence of the students, correlation coefficient was calculated. The following tables are the self-explanatory of result obtained from the analyses.

Table-1: Difference in Academic achievement between tribal and non tribal students.

Students group	N	M	SD	t-Value	Level of significance
Tribe	587	45.98	11.58		
Non-tribe	479	46.06	12.31	0.11	Not Significant

Table-2: Difference in academic achievement between tribal and Non-Tribal   children- Gender Difference

Category		N	M	SD	t – value	Level of significance
Tribal	Boys	322	44.50	10.35	3.43	Significant at 0.01 level
	Girls	265	47.77	12.702		
Non-Tribal	Boys	279	47.00	12.89	1.98	Significant at 0.05 level
	Girls	200	44.75	11.35		

Table-3
Intellectual Difference Between Tribal and Non -Tribal Students in Different Standard at High School Levels

Category		N	M	SD	t – value	Level of significance
6th class	Tribal	141	28.40	10.46	3.71	Significant at 0.01 level
	Non-Tribal	130	33.45	11.91		
7th class	Tribal	186	28.00	11.36	8.59	Significant at 0.01 level
	Non-Tribal	125	38.38	8.92		
8th class	Tribal	148	31.93	11.52	8.24	Significant at 0.01 level
	Non-Tribal	126	41.63	7.01		
9th class	Tribal	48	32.73	12.62	6.46	Significant at 0.01 level
	Non-Tribal	98	43.04	6.70		

From the above table it that the mean academic score for tribal and non-tribal children are 45.98 and 46.06 respectively. The calculated t-value is 0.11 and it is not significant at 0.05 levels. Therefore the formulated hypothesis "There is a significant difference in   academic Achievement between the tribal and   non-tribal students at the high school level" is rejected. From this it is concluded

that both tribal and non-tribal children are similar in academic achievement.

Further it is observed from the table-2 the tribal girls are performing better in the academic achievement. Whereas the non-tribal boys are performing better in the academic achievement. Therefore the related hypotheses "There is a significant difference in academic achievement between tribal boys and girls" and " There is a significant difference in intelligence between non- tribal boys and girls" are accepted.

The table-3 infers that the non-tribal children studied in the different classes at high school level have more intelligence than their counterparts belong to the tribal communities.

To find out the relationship between the intelligence and academic achievement of the tribal and non-tribal children the investigators applied product moment correlation statistics and the correlation coefficient is 0.224(N= 1066, significant at 0.01 level). From this it is inferred that the there is strong positive relationship between intelligence and academic achievement of the children.

FINDINGS OF THE STUDY
The following are the findings of the present study.

- Academically, the achievement between non-tribal and tribal students does not differ.
- The non-tribal students of classes VI to IX have a higher intellectual level than tribal students of the same classes.
- Among the tribal students, the academic achievement of boys is found to be lower than that of girls.
- Among the non-tribal students, boys are found to be superior to girls in academic achievement.
- Students with higher intelligence levels are found to perform better academically than students with lower intelligence levels.

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