A STUDY RELATION BETWEEN ACADEMIC ACHIEVEMENT AND INTELLIGENCE OF SC & ST STUDENTS OF SECONDARY SCHOOLS AT GULBARGA

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Abstract: *In this modern ear a common societal value is academic achievement. Present research is deals with the identification of relation between the academic achievement and intelligence of the SC and ST students of secondary schools of Gulbarga city. The academic achievement of the students is always depends on their effort, intelligence and academic success. Academic achievement means acceptance and affection from the parents, teachers and the peer groups. The sample consisted of 280 students from different school of Gulbarga city.*
For this study researcher has adapted survey method and intelligent test administrated for data collection constructed by R.B.Cattell. The analysis of data was done by calculating correlation coefficient between academic achievement and intelligence and "t" value calculation to the significant difference relation. The findings of the study shows positive correlation among intelligence and academic achievement and no significant difference among SC and ST boys and girls of secondary schools.

Key Words: *Intelligence, Academic Achievement, SC and ST, Secondary School, Gulbarga.*

1. INTRODUCTION:

After the downfall of the Muslim rule, Britishers came to India and established the East India Company and ruled over more than 150 years. During this period education was to create man power to support British administration. During freedom struggle Indian nationalist faced two major movements first one is fighting for freedom of independent democratic country with its own governance, lead by M.K Gandhi and the second is social justice to all born in the free and democratic country without the discrimination of caste, religion and socio-economic status, lead by Bharatharatha Dr. B.R. Ambedkar. For the social justice, Constitution is being constituted significantly to provide all with health and wealth life within a period of 10 years from the day of independence. But the systems have been continued even today to comply with equality and social justice to all the citizens of Indian.

The achievements of human beings have been praised and prized by the society. A great agreement has been emphasized on moving forward to produce and manufacture something their own to obtain recognition. Modern human society has considered the enterprise and achievement as the index of human esteem. It has become evident that success and achievement are great needs of the life. The success depends on how much price, energy and effort to bear and attain the goal.

President of American Council of Education says 'human talent is our greatest natural resource which is needed to be conserved; hence the development of such talent is a primary concern of everyone'. If the human talents are not nurtured properly everyone will be deprived off everything, instead they are to be rightly developed for everyone to benefit a lot. The secondary school education is essentially general education suggests that it ought to be concerned primarily with the development of the students talent to expose the individual to become plumber, doctor, philosopher or with any identify. To measure the effectiveness of formal education of school system, vital interest is located on academic achievement. Thus academic achievement is the measuring product to serve the purpose of evaluation in education. The vital importance of inculcating the positive attitude and values are linked with the academic success and outcomes of the students.

Education takes place, when new ideas are blend with old; it is never the less to emphasize the importance of education in the human life and nation. The outcome of education determines the life progress and statues of citizens residing anywhere in the world and it is the vital force for the development of human life and the society at large. For all these school has a moulding influence on the individual achievement.
The school and teachers are the sources of initiating and inspiriting the students. Studying the students' achievement is of more importance, influenced by number of factors like, intelligence, adjustment, socio-economic status and personality. Among these intelligence is one of the most important factors that have been influencing the academic achievement of the students. (Harri 1961)

Academic achievement is the main focus for understanding and studying the individuals. Now it is scientifically established fact that academic achievement depends upon intelligence and capability. Intelligence is the most significant factor accounting for variations in academic achievement. At present education has become

extremely competitive and the courses on higher academic achievement of the students to get selected for better higher courses of study and eventually for better jobs. However the intelligent and achievement are found interrelated.

1.1 ACADEMIC ACHIEVEMENT:

Academic Achievement has become an index of child's future in the present competitive world. The important functions of examination are to find out academic achievement of every child. Achievement encompasses students' abilities and performances. Academic achievements are the general indicators of the real development of the child. They are the further references to predict the degree of attainment and success of the individual child. Goods (1973) has defined academic achievement as a knowledge acquiring or skill development in the school subjects usually found by IQ test scores or the marks assigned by the teachers or by both. Hawes (1982) Achievement is the successful accomplishment of performance in particular subject area or course.

1.2 INTELLIGENCE:

Intelligence is associated with child's own individuality. It is most important attribute of the student. Intelligence is very important factor for contributing academic achievements. It is generally agreed that more intelligent students attain high position in the class compared to less intelligent students. According to Singh (1976) high intelligent pupils are bound to be high achievers for ever if the subject is with favourable conditions. And also found that presence of superior intelligence only does not ensure high achievement. Even many students of superior intelligence are under achievers. According to Eysenck (1953) only a moderate scale for a satisfactory performance is obvious, that a certain amount of intelligence is necessary. But for high achievers they should have some other favourable variables like, personality, creativity, motivational level, and regularity in attendance, study habits, self-confidence etc. Many studies have revealed that findings of fewer gaps in the knowledge about relationship between Intelligence and academic achievement of SC and ST students of secondary schools. There are some studies which support the strong relationship with these two variables whereas other studies which have been propounded against the relationship between intelligence and academic achievement of SC and ST students of secondary schools. The present study aims at realizing the following objectives.

1.3 OBJECTIVES:

- To study the relation between intelligence and academic achievement of Xth class SC and ST students.
- To study the relation between intelligence and academic achievement of SC and ST boys.
- To study the relation between intelligence and academic achievement of SC and ST girls.
- To study the difference between SC and ST boys & girls on the measures of academic achievement

1.4 HYPOTHESIS:

- There will be a significant positive correlation between intelligence and academic achievement of SC and ST Students of Xth class.
- There will be a significant positive relation between scores of intelligence and academic achievement of SC and ST boys.
- There will be a significant positive relation between score of intelligence and academic achievement of SC and ST girls.
- There will be no significant differences of SC and ST boys and girls with the measures of academic achievement

1.4 JUSTIFICATION OF THE STUDY:

Academic Achievement is the main focus of the teaching learning process to improve the students' performance. It is the criteria for evaluating their achievements. It is the process of behavioural change of the students at the end of the instruction and course. The performance and academic achievement of students depends on different variables. Intellectual development based on environment & biological factors. The academic achievement is a strong indicator of students' success. Intelligence and Academic Achievement are interrelated for the student success. Intelligence of SC and ST students could optimize their academic achievements. The findings of the research might provide necessary vision for enhancing the academic achievement of the SC and ST students of secondary schools.

2. REVIEW OF RELATED LITERATURE:

Extensive researches have been conducted to examine the role of various factors on academic achievement. Gurubasappa (2009) studied intelligence as relation to self concept and academic achievement of secondary school students. The study found significant relation with academic achievement, intelligence and self concept among secondary school students.

Panda (2005) studied intelligence is related to academic achievement of tenth class students'. Objective of the study is to find relation between academic achievement and intelligence among tenth class secondary school students. Sample was 765 students from different secondary schools. The study found that significant difference in academic achievement of adolescents studying in different class of secondary schools.

Diseth (2003) studied intelligence and academic achievement compilation of boys and girls in Xth class students. The study found that there is no significant difference in intelligence and academic achievement among the

boys and girls studying in Xth class students. There is an average correlation in test scores and academic achievement of girls studying in Xth class.

Agarwal (2002) studied different correlation of academic achievement and intelligence. Sample was 300 from tenth class secondary school students. The study found that intelligence is more powerful factor for academic achievement of Xth class students.

Ayishabi (1991) studied biology achievement of scheduled caste and non-scheduled caste high school pupils. The study was conducted on 910 students of standard IX in Kerala, Biology achievement, verbal test of intelligence and socio economic status scale were used for the study. The results showed that backward caste students in biology achievement differed significantly on urban and rural sample.

3. METHODOLOGY:
3.1 SAMPLE:
The present research is a survey method in nature. It is conducted in Gulbarga City of Karnataka. The sample consisted of 280 SC and ST of students of secondary schools, which includes 140 boys and 140 girl students of Xth Class from 8 different secondary schools of Gulbarga city.

3.2 TOOLS FOR COLLECTION OF DATA:
The survey method is adopted and intelligent test is administrated for data collection constructed by Cattell.R.B. Investigator personally went to the school for date collection in different school of Gulbarga city. The analysis of data was done by finding out the correlation coefficient between academic achievement and intelligence and "t" value is calculated to find the significant relation.

4. RESULTS, ANALYSIS AND DISCUSSION:
The analysis of intelligence and academic achievement scores by objective wise descriptive and inferential statistics was used. The comparison of the means of SC and ST boys and girls of secondary school Xth class students is made.
4.1 DATA BASED DESCRIPTION OF OBJECTIVE: 1
To study the relation between intelligence and academic achievement of Xth class SC and ST students.

Table No-01 Correlation of Intelligence and Academic Achievement.

Boys and Girls	Variable	Academic Achievement
	Intelligence	0.80
Boys	Variable	Academic Achievement
	Intelligence	0.69
Girls	Variable	Academic Achievement
	Intelligence	0.75

The above table shows the significant positive correlation between intelligence and academic achievement SC and ST students of secondary schools. The correlation coefficient of 0.80 is significant. The value of 't' is significant at 0.01 levels therefore the hypothesis is accepted.

The existence of correlation coefficient of boys is 0.69 and girls is 0.75 are significant. The 't' value is significant at 0.01, levels hence the hypothesis is accepted.

4.2 DATA BASED DESCRIPTION OF OBJECTIVE: 2
To study the relation between intelligence and academic achievement of SC and ST boys.

Table No -02. Mean Scores Difference of Intelligence and Academic Achievement.

Group	No	Mean	SD	Calculated t	Level of significant
High Intelligent Boys	42	71.6	5.54		0.05
Low Intelligent Boys	48	46.4	15.31	6.99	0.01

The above table shows that there are 42 boys with high intelligence with mean scores of 71.6 and the mean score of the low intelligent boys is 46.4 their SD was found to be 5.54 and 15.31 respectively, when the significance of difference between the mean was calculated. The 't' value was found that 6.99 which are significant at 0.05 and 0.01 levels therefore the hypothesis is accepted.

Therefore the result found that the high intelligent SC and ST boys of secondary school scored much higher than the low intelligent SC and ST boys on the measure of academic achievement.

4.3 DATA BASED DESCRIPTION OF OBJECTIVE: 3
To study the relation between intelligence and academic achievement of SC and ST girl.

Table No 03. Mean Scores Difference of Intelligence and Academic Achievement.

Group	No	Mean	SD	Calculated t	Level of significant
High Intelligent Girls	36	70.56	8.17		0.05
Low Intelligent Girls	54	49.00	10.95	6.98	0.01

The above table shows that there are 36 girls with high intelligent mean scores of 70.56 and the mean score of the low intelligence girls of 49.00 there and SD were found to be 8.17 and 10.95 respectively, when the significance of difference between the mean was calculated. The 't' value of 6.98 is significant at 0.05 and 0.01, levels and hence the hypothesis is accepted.

Therefore the result found that the high intelligent SC and ST boys scored much higher than the low intelligent SC and ST boys on the measure of academic achievement.

4.4 DATA BASED DESCRIPTION OF OBJECTIVE: 4

To study the difference between SC and ST boys and girls on measure of academic achievement

Table No- 04 Measure of Academic Achievement of High Intelligent Boys.

Group	No	Mean	SD	Calculated t	Level of significant
High Intelligent boys	42	71.6	5.54		0.05
Low Intelligent Girls	36	70.66	8.17	0.68	Not applicable

The above table is shows the mean scores of high Intelligent SC and ST boys found 70.66, which is higher than that of higher intelligent SC and ST girls is 71.63 and their SD value are 5.54 and 8.17 respectively. The significance of difference between the mean scores was calculated.

The 't' value of 0.68 shows that there is no significant difference between the mean scores of high intelligent SC and ST boys and high intelligent SC and ST girls. Thus, the result found that no significant difference shown between the two group. Hence the hypothesis is accepted.

Table No- 04 Measure of Academic Achievement of High Intelligent Girls

Group	No	Mean	SD	Calculated 't'	Level of significant
Intelligent boys	48	46.4	15.31		0.05
Intelligent Girls	54	49.08	10.95	0.7	Not applicable

Above table shows the mean value of low intelligent SC and ST boys mean is 46.4 it is less than that of low intelligent SC and ST girls mean of 49.08 and their S.D values 15.31 and 10.95 respectively. The significance difference between means scores was calculated. The 't' value of 0.7 shows that there is no significant difference between the mean value of low intelligent SC and ST boys and low intelligent SC and ST girls. Therefore, the result tells clearly there is no sex difference among low intelligent group where the 't' value of 0.7 is positively significant. Hence the hypotheses are accepted.

4.5 FINDINGS AND CONCLUSIONS:
- The high score of intelligence lead to high academic achievement of SC & ST students of secondary schools.
- There is significant correlation between intelligence and academic achievement of high intelligence SC and ST boys and girls compare to low intelligent SC and ST boys & girls students of secondary schools.
- Research result shown there is a positive correlation between the scores of intelligence and academic achievement of SC and ST boys and girls of secondary school student.
- Research result shows no much difference between the SC and ST boys and girls on the measure of academic achievement of secondary schools.
- Research result shows there is no significant difference between SC and ST boys and girls on the measure of academic achievement of secondary schools.
- The result of the study reveals that intelligence positively influences the academic achievement of SC and ST student of secondary school.
- Academic achievement and intelligence SC and ST students of secondary schools are interdependent positively.

4.6 LIMITATION OF THE STUDY:
The study is limited to SC and ST students of secondary school of Gulbarga city of Karnataka state of India. Hence this research results cannot be generalized. Due to shortage of resources, the study was limited to 8 secondary schools only.

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