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**ACADEMIC ACHIEVEMENT AND INTELLIGENCE OF SECONDARY SCHOOL
STUDENTS IN LAKHIMPUR DISTRICT OF ASSAM**

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Abstract: The present study investigated the academic achievement and intelligence of secondary school students in Lakhimpur district of Assam. The study was conducted on fifty two (52) class-X students by giving due representation to boys 26 and girls 26 as well as rural and urban localities of Lakhimpur district in Assam. The schools were selected using stratified random sampling technique, and students were selected using simple random sampling technique. The selected schools belong to the category of government as well as private schools which are affiliated to SEBA. The descriptive survey method is used for data collection. As far as intelligence was measured by using the group test of mental ability constructed and standardized by Dr. S. Jalota and the academic achievement of the students was concerned for the purpose of the present study, the investigators visited the selected schools and collected the school records of the selected students i.e. mark's obtained by the students in the last annual examination, 2019 (i.e. Class IX annual examination). The findings of this study reported that there is a positive relationship between academic achievement and intelligence among the secondary school students in Lakhimpur district of Assam.

Keywords: Academic Achievement, Intelligence and Secondary School Students.

Introduction

Education is a very ambiguous in its meaning and it's also a dynamic concept. It's meaning changes from time to time. It is interpreted by different persons from their own views, situation and ideas. Education enables the individual to reason about what is good or bad, right or wrong, true or false, justice or injustice etc. along with removing the narrowness of human mind, blind faith and beliefs respectively. It has conceived of as training for better life and better social adjustment in a community or group. Education helps in developing the capacity of individual and preparing them for participation in a whole range of social and professional activities that increase the chance of success and access. It promotes initiative and enterprises that facilitate horizontal and vertical mobility towards egalitarian society.

Introduction of the Variables

In the present study, two important variables are taken. These are Academic Achievement and Intelligence. They are discussed given below:

Academic Achievement

Academic Achievement is generally regarded as the display of knowledge, attainment or skills developed in the school subjects. It is the level of performance in school subject as exhibited by an individual. The study of the academic achievement of secondary school students will be helpful in providing guidance and counseling to this section of the society. The study becomes more significant as secondary school students are in terminal stage where a large number of children leave school after completion of class X and being acquiring productive work skills, where as for some students secondary stage becomes terminal on account of socio-economic circumstances. Moreover, the secondary school years are shadowed by the spectra of achieving responsible board examination marks. Since the marks obtained in the board examination will determine future options for the students. The school performance guides the function of selection and differentiation among students on the basis of their scholastic and other attainment. The academic achievement of student assumes enormous importance in view of its practical values. It forms the main basis of admission and getting jobs. It serves as an important educational goal.

A test of educational achievement is one that is designed to measure knowledge, understanding and skills of students in a particular subject or a group of subjects taught in schools. It is designed to measure the individual's quality and quantity of learning in a single or more school subjects yielding a score for each subject and a total score for all the subjects

combined. Academic Achievement is of paramount importance particularly in the present socio-economic and cultural context. Obviously, in the school great emphasis is placed on achievement right from the beginning of formal education. The school has its own systematic hierarchy which is largely based on achievement and performance rather than other considerations. Thus, the school tends to emphasise achievement which facilitates among other things, the process of role allocation for the social system. The school performs the functions of selections and differentiation among students on the basis of their scholastic and other attainment and opens avenues for advancement again, primarily in terms of achievements. The students at school are trained to accept this hierarchy based on achievement. This helps the students to be released from the family status in certain ways. His personal status is inevitably a direct function of the position he achieves, mainly in the formal classroom setting. Researchers have shown that besides being the criteria of promotion to the next class, academic achievement is an index of all future successes in life. Superior achievers in the academic world generally tend to maintain their level of achievement in the occupational field also. To reach the goal of excellence in the academic achievement to the maximum, a review of correlate of academic achievement and its implications for educationists and policy makers would be meaningful. The role of academic achievement in the educational system in particular and in the development of nations in general is assuming greater importance. This is because of the new demand arising from the rapidly changing societies as well as because of the increased aspirations of individuals for economic, cultural and intellectual improvement.

Thus, it can be concluded that the academic achievement is said to be level of proficiency attained in academic work or formally acquired knowledge in school subjects. This is often represented by students in examination. In view of this, the factors affecting it play an important role in determining an individual's position and status in the reference group.

Intelligence

Intelligence is a component of successful living. One indicator of the difficulty involved in understanding intelligence is the variety of the definitions used in its measurement. Intelligence refers to ease or difficulty with which people are able to learn various things. On the basis of this working definitions, people of high intelligence in a particular functional earn new behaviorin that areawith comparative ease, while people with low intelligence find it difficult to learn the same things. As intelligence is an important

determinate of one's performance in any field of activity, it tries to make an estimate of one's future success or failure. It is the future reference to predict the degree of attainment or success of an individual in an area or activity. Behaviour is generally influenced by the intellectual potential of a person. Intelligence refers to a student's ability and capacity and maintaining a definite direction in thinking to attain goal.

Intelligence is the necessary condition for achievement. It is impossible to achieve without corresponding intelligence which is comprised of mental abilities. Ability is about the quality of being able to do something which serves as the foundation of achievement. Intelligence is evidenced by past and present achievement used for predicting future achievement. Intelligence sets up the foundation of achievement. The occurrence of achievement requires not only the corresponding intelligence but also motivated and supported by appropriate academically congenial environment.

Rationale of the Study

The present study has been designed to study the *Academic Achievement* and *Intelligence* of Secondary School Students in Lakhimpur District of Assam. Here, the *Academic Achievement* refers to educational performance of examinees in class X examination taking into account the marks obtained by them in all subjects in their previous examinations. The performance will be analysed qualitatively, and comparison of performance of males and females as well as their performance in urban and rural schools is done. The present study tried to investigate if there exists any relationship between academic achievement on the one hand and intelligence of secondary school students on the other hand.

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. Intelligence is a variable that contributes towards academic achievement, and the evidence of the same is presented by a large number of researches. In view of number of the present study the researchers had gone through the studies that are related to the variables included in the present study.

Dhull, Jitender (2012) in 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, revealed that there was a significant difference in the mean scores of academic anxiety of government and private school students. It might, therefore be concluded that government school students had less academic anxiety in comparison to private school students. **Saikia, Pallabi and Choudhary (2014)** made a study on “Effect of Intelligence on Academic Achievement of Secondary School Students- A Study in Lakhimpur District of Assam”. The objective of this study was to study the academic achievement of the secondary school students according to gender and place of residence; to determine the level of intelligence to gender and place of residence. This study is conducted on a sample of 100 class X students from government and provincialised schools of Lakhimpur district of Assam. The normative survey method is used for data collection. The findings of the study was: (i) there is difference between boys and girls student on the academic achievement in the test examination, (ii) there is difference between rural and urban students on the average academic achievement in the test examination and (iii) it is also found that the mean score of intelligence for both rural and urban students is quite high. **Parveen, Danista (2014)** in her study entitled “relationship between intelligence and academic achievement of secondary level students” found that (1) There is significant and positive correlation found between intelligence and academic achievement of secondary level students. It was found that students from low intelligence have lower academic achievement as compared to the academic achievement of students from higher intelligence level. (2) There is significant and positive correlation found between intelligence and academic achievement of secondary level students on male and female sample. It was found that male and female students from low intelligence level have lower academic achievement as compared to the academic achievement of both male and female students from higher intelligence level. **Dutta, Jadab (2016)** conducted a study on “Academic Achievement, Emotional Maturity and Intelligence of Secondary School Students in Assam”. This study is conducted on a sample of 1000 students comprised of 500 boys and 500 girls selected from 28 secondary schools who are studying in class-X students by giving due representation to boys and girls, rural and urban areas as well as government and private students of both the districts. The selected schools belong to the category of provincialized schools which are affiliated to SEBA i.e., Board of Secondary Education, Assam and controlled and supervised by the Department of Education, Government of Assam. The schools were selected using

stratified random sampling technique, and students were selected using simple random sampling technique. . The descriptive survey method is used for data collection using Emotional Maturity Scale (EMS) developed by Dr Yashvir Singh (Agra) and Dr Mahesh Bhargava (Agra) 1984 and group test of mental ability was constructed and standardized by Dr. S. S. Jalota. The study reported that the comparison between academic achievement, emotional maturity and intelligence it was depicted that the secondary school students in whole sample of both the districts were having high academic achievement; it also seen that there is a positive relationship between academic achievement and intelligence among the secondary school students of whole sample of both the districts in general. **Gogoi, Nitul, Dutta. Jadab&Soni, J.C (2016)**“A Comparative Study on Academic Achievement and Intelligence of Class X Students of Jawahar Navodaya Vidyalaya and Kendriya Vidyalaya in Lakhimpur District, Assam”. The data were collected from a120 students (60 JNV and 60 KV). Group Test of Mental Ability by Dr. S. Jalota (1976) was used to find out intelligence of students and for measuring academic achievement the Board Examination marks of the students were used. The main finding of the study was

- i) There is no true difference between the students of JNV and KV on academic achievement.
- ii) There is no true difference between JNV and KV students for both males and females on academic achievement.
- iii) There is no true difference between JNV and KV rural and urban students on academic achievement.
- iv) There is no significant difference between JNV and KV female students on intelligence.
- v) There is significant difference between the students of JNV and KV on intelligence in the whole sample.
- vi) There is significant difference between the students of JNV and KV rural and urban students on intelligence and
- vii) There is significant difference between JNV and KV male students on intelligence.

From the survey of related studies, it is evident that very few studies are conducted in North Eastern part of India in general and Assam in particular. At the same time, hardly one/two studies are conducted in relation to these variables on secondary school students in the area of Lakhimpur district of Assam. So, the investigators are motivated to take up a

comparative study and to investigate the relationship between these variables on the secondary school students of Lakhimpur district of Assam.

Statement of the Problem

The problem under study is stated as “**Academic Achievement and Intelligence of Secondary School Students in Lakhimpur District of Assam**”.

Objectives of the Study

The study was designed to achieve the following objectives:

1. To study the overall academic achievement and intelligence of secondary school students in Lakhimpur district of Assam.
2. To test the significance of the mean difference on academic achievement between (a) male and female (b) rural and urban (c) government and private secondary school students of Lakhimpur district, Assam.
3. To test the significance of the mean difference on intelligence between (a) male and female (b) rural and urban (c) government and private secondary school students in Lakhimpur district of Assam.

Hypotheses of the Study

In view of the objectives of the study the investigators formulated the following null hypotheses:

H:01 There is no significant difference in the mean scores of academic achievement between (a) male and female (b) urban and rural (c) government and private secondary school students in Lakhimpur district of Assam.

H:02 There is no significant difference in the mean scores of intelligence between (a) male and female (b) urban and rural (c) government and private secondary school students in Lakhimpur district.

Methodology of the Study

The descriptive survey method is used in this study.

Population of the Study

The population of the present study constituted all the students studying in class X in secondary schools of Lakhimpur district of Assam.

Sample of the Study

The sample is of a small number of representative individuals from the population. This study conducted on a sample of 52 class-X students by giving due representation to boys 26

and girls 26 as well as rural and urban localities of Lakhimpur district. The 02 government and 02 private secondary schools were selected using stratified random sampling technique and students were selected using simple random sampling technique.

Tools Used

Group Test of Mental Ability test developed by Dr. S. Jalota (1976). It has 100 types multiple choice questions employing various types of sub-tests. The academic achievement of the students was concerned for the purpose of the present study, the investigators visited the selected schools and collected the school records of the selected students i.e. mark's obtained by the students in the last annual examination, 2019 i.e. Class IX annual examination.

Statistical Techniques Used

In this study, various statistical measures such as Mean, SD and t-test were used for analyzing data.

Result and Discussion

Collected data through above mentioned variable were analyzed in terms of mean, standard deviation and t-test method. The results have been presented in the objectives/hypothesis wise.

Objective 1: To study the overall academic achievement and intelligence of secondary school students in Lakhimpur district of Assam.

Table 1: Showing the mean and standard deviation on the academic achievement and intelligence of secondary school students in Lakhimpur district of Assam

Variable	N	Mean	Standard Deviation
Academic Achievement	52	372.40	106.58
Intelligence	52	70.44	9.92

The Table-1 shows the mean scores on academic achievement and intelligence are 372.40 and 70.44 respectively with the S.D as 106.58 and 9.92 for the same variables in order for the whole sample.

Therefore, the table depicted that the secondary school students in whole sample of Lakhimpur district were having high academic achievement. So far their mean value 372.40 is concerned. Whereas looking into the norms of the intelligence scores it is understood that in whole sample of Lakhimpur district secondary school students did average intelligence in terms of their mean scores. In these contexts it is to be generalized that there is a positive

relationship between academic achievement and intelligence among the secondary school students in Lakhimpur district of Assam.

Major findings: There is a positive relationship between academic achievement and intelligence among the secondary school students in Lakhimpur district of Assam.

Objective 2: To test the significance of the mean difference on academic achievement between (a) male and female (b) rural and urban (c) government and private secondary school students of Lakhimpur district, Assam.

Hypothesis 01: There is no significant difference in the mean scores of academic achievement between (a) male and female (b) urban and rural (c) government and private secondary school students in Lakhimpur district of Assam.

Table 02: Showing the Mean, Standard deviation and t-value of the academic achievement between (a) male and female (b) urban and rural (c) government and private secondary school students in Lakhimpur district of Assam.

Variable	Group	N	Mean	Standard Deviation	t-value	Remark
Academic Achievement	Male	26	355.08	106.73	1.73	Not Significant
	Female	26	389.73	105.62		
	Rural	26	299.57	72.15	6.74	Significant
	Urban	26	445.23	83.26		
	Government	26	299.58	72.15	6.74	Significant
	Private	26	445.23	83.27		

From above table, it can be observed that the mean scores of male and female students are 355.08 and 389.73 respectively. When the t-test was applied to compare the mean scores of both the groups, it was found that the calculated t-value (1.73) is smaller than the table value 2.01 at the 0.05 level of significance. This means that the mean difference is not significant. Hence, null hypothesis is accepted. This further means that male and female secondary school students have similar level for academic performance in all subjects.

In above table-2, it was seen that the mean scores of rural and urban students are 299.57 and 445.23 respectively. The computed t-value between their mean differences is 6.74 which are found significant at 0.05 levels. Hence the hypothesis is rejected. Therefore, rural and urban secondary school students differ in their academic achievement level of all subjects.

The result from Table-2 also showed that the mean scores of both government and private students are 299.58 and 445.23 respectively. When the t-test was applied to the significance of the mean difference between these groups, it reported a CR (t) value 6.74. This was found to be highly significant. Hence, the null hypothesis is rejected. This means that there is a real difference in academic achievement between government and private secondary school students in Lakhimpur district of Assam. The private school student's performances are always better than government school students.

Major findings: The rural and urban as well as government and private school students of Lakhimpur district have shown real difference in their academic performance whereas no such difference was found between male and female students for the same district. **Objective 03:** To test the significance of the mean difference on intelligence between (a) male and female (b) rural and urban (c) government and private secondary school students in Lakhimpur district of Assam.

Hypothesis 02: There is no significant difference in the mean scores of intelligence between (a) male and female (b) urban and rural (c) government and private secondary school students in Lakhimpur district of Assam.

Table 03: Showing the mean, standard deviation and t-value of the intelligence between (a) male and female (b) urban and rural (c) government and private secondary school students in Lakhimpur district of Assam.

Variable	Group	N	Mean	Standard Deviation	t-value	Remark
Intelligence	Male	26	67.96	8.99	1.84	Not Significant
	Female	26	72.92	10.35		
	Rural	26	71.46	7.48	0.74	Not Significant
	Urban	26	69.42	11.95		
	Government	26	66.5	10.11	3.05	Significant
	Private	26	74.38	8.14		

From the above table, it can be observed that the mean scores of both male and female students are 67.96 and 72.92 respectively. When the t-test was applied to compare the mean scores of both the groups, it was found that the calculated t-value (1.84) is smaller than the table value 2.01 at 0.05 level of significance. Hence null hypothesis is accepted. This means that there is a no significant difference in intelligence ability of male and female secondary students of Lakhimpur district.

It can be also observed that the mean scores of both rural and urban students are 71.46 and 69.42 respectively. When the t-test was applied to test the significance of the mean difference between these groups, it reported a CR (t) value 0.74. This was found to be not significant. Hence null hypothesis is accepted. This further means that there is a no significance difference in intelligence of both rural and urban secondary students of Lakhimpur district.

The result from Table-3 shows that the mean scores of both government and private students are 66.5 and 74.38 respectively. The computed t-value between their mean differences is 3.05 which are found significant at 0.05 level. Hence hypothesis is rejected. Therefore government and private secondary students of are found great difference in intelligence of Lakhimpur district.

Major findings: It is found that the intelligence of secondary school students found to similar ability in respect of male/female and rural/urban areas whereas significant difference was found between government and private students for the same district. It means the intelligence ability of private school students is always better than government school students.

Recommendations of the Study

On the basis of the findings the following recommendations are proposed:

1. The school teachers and school administrators should employ: i) Conduct special classes for the weaker students and ii) Conduct of guardians meetings in the school for the various development activities of students and schools.
2. To provide easily accessible library facilities for intellectual growth and updated of knowledge through books and newspapers.
3. School counsellors are under pressure to assist in the effort to increase student achievement. They can respond to this challenge by working to improve the school climate, using direct interventions such as teaching study skills and involving students in achievement motivation groups, and by increasing the involvement of parents in the educational process.

So, in conclusions for above recommendations school administrator, teachers, parents and government to be able to perform well their roles or duties to the fullest of their potentialities, it is hoped by doing so it is sure that it will promote the academically and mentally developed the students.

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