Full Length Research Article

A COMPARATIVE STUDY ON ACADEMIC ACHIEVEMENT AND INTELLIGENCE OF CLASS X STUDENTS OF JAWAHARNAVODAYAVIDYALAYA AND KENDRIYAVIDYALAYA IN LAKHIMPUR DISTRICT, ASSAM

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ABSTRACT

The present study dealt with the academic achievement and intelligence of class X students of JawaharNavodayaVidyalaya and KendriyaVidyalaya in Lakhimpur district, Assam. The sample consisted of 120 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 that the students of JNV and KV differ significantly on both intelligence and academic achievement.

INTRODUCTION

Education is regarded as the potential instrument of national development. A modern society cannot achieve its aim of economic growth, technical development and cultural advancement without fully harnessing the talents of its citizens. Education strives to develop fully the intellectual potential of the students and make efforts to see that their potentialities are fully recognised and channelised for the benefit of the individuals and society. Education is the process of bringing out the talents and potentialities of individuals and to unfold their natural abilities and interests before the society. It proceeds from birth to death and schools exert greater influence in educating the child and promoting his/her academic achievement. Therefore, the level of academic achievement of a child at any stage depends on the extent to which his/her natural potentialities have been developed. Introduction of the Variables under Study. In the present study, two important variables are studied. These are Academic Achievement and Intelligence.

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The variables are described along with the relationship between these in the context of secondary school students of JawaharNavodayaVidyalayas (JNVs) and KendriyaVidyalayas (KVs) in Lakhimpur district of Assam.

Academic Achievement

The term 'academic achievement' refers to the level of success or proficiency attained in some specific areas concerning scholastic or academic work. Concise Dictionary of Education (1982) has explained academic achievement as "successful accomplishment or performances in particular subjects, areas, or courses usually by reasons of skill, hard work and interest typically summarized in various types of grades, marks, scores, or descriptive commentary". Academic Achievement is the way of knowing learning of different subjects and now it is scientifically established fact that academic achievement is inextricable bound up with and dependent upon intelligence and ability. Intelligence is the single most important factor accounting for variation in academic achievement. Now a day, education has become highly competitive and commercial. On basis of better academic achievement only student gets selected for better courses of study and eventually for better job.

It does not however necessary follows that intelligence and achievements are identical that one can be predicted perfectly from other. Generally, academic achievement is the scores obtained in the examinations. A normal achiever is one who accomplishes what may generally be expected of him/her for their age. On the other hand, over-achiever is one who accomplishes more than their abilities would seem to justify and under-achiever is one who accomplishes less than their abilities. Thus, there are various aspects of the concept of academic achievement, which has a great bearing on the personality of the student.

Intelligence

Intelligence is the power or faculty which helps us in understanding thinking and reasoning about things or people. Intelligence is the only word which makes the human being different from animal. God has equipped man with certain cognitive abilities by which he becomes a rational being. David Wechsler (1958) said, "Intelligence is the aggregates of global capacity of an individual to act purposefully, to think rationally and to deal effectively with his environment." Our learning and thinking are possible through intelligence. It is an organization comprising the abilities of readiness, correctness and of understanding complicated and abstract things and with its help a person shows necessary mental control and action in solving problems. Intelligence is a term describing one or more capacities of the mind. In different context, the term intelligence can be defined in different ways, including the capacities for abstract thinking, understanding, communication, reasoning, learning, planning, emotional intelligence and problem solving. Intelligence is most widely studied in human being, but it is also observed in animals and plants as well.

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 that enables one to do something which serves as the foundation of achievement. According to Stern (1914), "Intelligence is a general capacity of an individual consciously to adjust his thinking to new requirements. It is the general mental adaptability to new problems and conditions of life".
L. Thurstone (1924), "Intelligence, considered as a mental trait, is the capacity to make impulses focal at their early, unfinished stage of formation. Intelligence is, therefore, the capacity for abstraction, which is an inhibitory process."
According to J. Piaget (1963), "Intelligence is assimilation to the extent that it incorporates all the given data of experience within its framework. There can be no doubt either, that mental life is also accommodation to the environment. Assimilation can never be complete because by incorporating new elements into its earlier schemata the intelligence constantly modifies the latter in order to adjust them to new elements."

Review of Related Literature

The investigator made a candid effort for reviewing the related literatures or studies conducted in India. Begum, T.S. and Phukan, M (2001) revealed that the correlation between academic achievement and intelligence was greater in the case of girls than in case of boys.

Chaudhary, (2004) found that there was a highly significant correlation between intelligence and academic achievement. Panigrahi, (2005) studied academic achievement in relation to intelligence and socio-economic status of high school students with the objective of examining the influence of intelligence and socio-economic status on academic achievement of high school students by taking a sample of 100 students from Bhubaneswar city of Odisha and found that there was significant and positive correlation between academic achievement and intelligence.

Panda, (2005) studied correlation between academic achievement and intelligence of class IX students with the objective of studying the relationship between academic achievement and intelligence by taking a sample of 765 secondary school adolescents studying in government, aided and private schools and found that there was low relationship between intelligence and academic achievement in different categories of schools and also there was a significant difference in academic achievement of students studying in different categories of schools. Malti (2006) in her study entitled, "A comparative study of values, intelligence and academic achievement of students of UP, CBSE and ICSE board schools" found that no significance differences in the intelligence of students were found between inter-board and intra-board, overall, inter-gender and intra-gender. The achievement of total students of CBSE board was found significantly higher than that of UP board and no significant difference was found in achievement of CBSE and ICSE board school students. Nalini and Bhatta (2009) found a significant relationship between academic achievement and intelligence.

Habibolla and Abdullah, (2010) in their study entitled "Intelligence and academic Achievement: An investigation of gender differences" found that there existed a significant relationship between intelligence and academic achievement for both male and female separately and in total sample. 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.
Chandra, R. and Azimmudin, (2013) in his study entitled "influence of intelligence and gender on academic achievement of secondary school students of Lucknow city" found that there was no influence of gender on academic achievement but intelligence influenced the academic achievement of the students. 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. Bijoy, Soni and Jadab (2014) conducted a study on "Evaluation of Social Science Curriculum at Elementary Stage in Assam". This study is conducted on a sample of 550 students and teachers selected from 20 schools from urban and rural settings of Lakhimpur District. The sample is comprised of 400 students taking 200 each from rural and urban with 100 each belonging to males and females from both the areas respectively. Similarly, teacher's sample of 150 was consisted of 75 each from rural and urban with 50 and 25 males and females respectively from rural and urban areas. The descriptive survey method was used for data collection using questionnaire for Evaluation of Social Science Curriculum (QESSC) and Attitude Inventory Towards Evaluation of Social Science Curriculum (AITESSC). On the basis of the analysis of the responses of the whole sample, 94% students and 97% teachers reported that social science helps the learners to adjust with the social and physical environment. It also found that Social science is the applied branch of social sciences introduced in the curriculum at school state with a view to developing proper attitudes, sensibilities and skills in future citizens.

Pranab, Soni and Jadab (2014), conducted a study on "A Comparative Study of Delinquency Prone and Non-Delinquency Prone Adolescents with regards to Self-Concept, Emotional Maturity and Academic Achievement in Assam". This study is conducted on a sample of 500 adolescents comprised of 200 delinquencies prone and 300 non-delinquencies prone adolescents selected randomly from 12 secondary and higher secondary schools. The descriptive survey method is used for data collection using Lidhoo's Delinquency Proneness Scale (1989), Self-concept Questionnaire (Saraswat (1981), Emotional Maturity Scale (Bhargava and Singh (1990), and the Students Performance Record from the School. The study reported that delinquency prone adolescents have low self-concept, low emotional maturity and poor academic achievement than that of non-delinquency prone adolescents. Further, the study showed the positive co-relation among self-concept, emotional maturity and academic achievement.

Suresh, Soni and Jadab (2014) conducted a study on "A Study of Adjustment, Level of Aspiration, self-concept and Academic Achievement of Visually Handicapped School Children of Assam". The data were collected from a sample of 400 visually handicapped children 200 boys and 200 girls who were studying in the classes VI to X (age 12 to 16 years) in six visually handicapped schools of lower and upper Assam selected by using simple random technique. The descriptive survey method was used for data collection using (i) Adjustment Inventory standardized by A.K.P Sinha and R.P.Singh; (ii) Self -Concept Inventory standardized by Raj Kumar Saraswat; (iii) Level of Educational Aspiration constructed by J.C.Soni and (iv) Academic Achievement from School Record. The study reported that the adjustment of visually handicapped boys and girls was found similar on overall adjustment. It also revealed that there existed no relationship between (a) adjustment and level of educational aspirations; (b) adjustment and self-concept and (c) adjustment and academic achievement of visually handicapped children. In another study conducted by Suresh, Jadab and Soni (2015) found that on (i) The adjustment of visually handicapped boys and girls are found similar on overall adjustment; (ii) The results of the study further show that visually handicapped boys and girls do not differ significantly in respect of academic achievement; (iii) The study revealed that there exist no relationship between adjustment and academic achievement of visually handicapped children and (iv) The interaction between adjustment no impact on academic achievement. Dutta.Jadab, Chetia, Pranab and Soni, (2015) conducted a study on "A Comparative Study on Intelligence of Secondary School Students in Lakhimpur District of Assam". This study is conducted on a sample of 500 Students comprised of 250 boys and 250 girls selected randomly from 16 Government and Private secondary schools of Lakhimpur district of Assam. The descriptive survey method is used for data collection using group test of mental ability was constructed and standardized by Dr. S. Jalota. The findings of the study reported that there are no difference on intelligence in respect of male and females of private and rural male/female private secondary school students. But it reported real difference in overall between government and urban private secondary school students.

Dutta.Jadab, Rajknower, Suresh and Soni, (2015) conducted a study on "A Comparative Study on Intelligence of Secondary School Students in Lakhimpur and Sonitpur Districts of Assam". This study is conducted on a sample of 1000 Students of comprised 500 boys and 500 girls selected randomly from 32 Government and Private secondary schools of both districts of Assam. The descriptive survey method is used for data collection using group test of mental ability was constructed and standardized by Dr. S. Jalota. The study showed that there are major differences in the intelligence of secondary school students of both districts whether they belong to government and private male/female and urban male and female private students. This study also showed that there is a no difference between rural and urban govt., male/female; govt., male/female of rural; male/female of urban; male/female of private and rural male and female of private secondary students of both the districts on intelligence. Dutta.Jadab, Rajknower, Suresh and Soni, (2016) conducted a study on "A Comparative Study on Intelligence of Secondary School Students in Sonitpur District of Assam". This study is conducted on a sample of 500 Students comprised of 250 boys and 250 girls selected randomly from 16 Government and Private secondary schools of Sonitpur district of Assam. The descriptive survey method is used for data collection using group test of mental ability was constructed and standardized by Dr. S. Jalota. The study clearly revealed that in the whole sample the secondary school students studying in government and private schools as well as belonging to in urban and rural areas do differ significantly in respect of their intelligence. However, the separate comparison of male and female students of (a) government and private schools; (b) government schools located in urban and rural areas and as well as (c) private schools located in urban and rural areas showed no significant mean differences on their intelligence scores.

Significance of the Problem

The present study was conducted on the academic achievement and intelligence of students of Jawahar Navodaya Vidyalaya and Kendriya Vidyalaya in Lakhimpur District of Assam. JNV is a residential school, predominantly for the children of rural areas, whereas the KV is a non-residential school for the children of Central Government employees including defense personnel, mainly for the students belonging to urban areas. The NavodayaVidyalaya system is a unique experiment unparalleled in the annals of school education. Its significance lies in the selection of talented rural children as the target group and the attempt to provide them with quality education comparable to the best in a residential school system.

On the other hand, non residential Kendriya Vidyalayas are to provide quality school education to the children of transferable Central Government employees including defense and paramilitary personnel, pursue academic excellence, set standards in school education, initiative innovations in teaching-learning pedagogies and promote national integration. There are as such no studies on students of JNVs and KVs. Considering the objectives of JNVs and KVs, the investigator is motivated to study the academic achievement and intelligence of class X students of JawaharNavodayaVidyalaya and KendriyaVidyalaya in Lakhimpur District of Assam.

Statement of the Problem

The problem of the present study has been stated as follows:
"A Comparative Study on Academic Achievement and Intelligence of Class X Students of Jawahar Navodaya Vidyalaya and Kendriya Vidyalaya in Lakhimpur District, Assam".

Objectives of the Study

The study was designed to achieve the following objectives.

- To compare the academic achievement of students of Jawahar Navodaya Vidyalaya and Kendriya Vidyalaya.
- To compare the intelligence of students of Jawahar Navodaya Vidyalaya and Kendriya Vidyalaya.
- To compare the academic achievement of rural students of Jawahar Navodaya Vidyalaya and Kendriya Vidyalaya.
- To compare the academic achievement of urban students of Jawahar Navodaya Vidyalaya and Kendriya Vidyalaya.
- To compare the intelligence of rural students of Jawahar Navodaya Vidyalaya and Kendriya Vidyalaya.
- To compare the intelligence of urban students of Jawahar Navodaya Vidyalaya and Kendriya Vidyalaya.
- To compare the academic achievement of male students of Jawahar Navodaya Vidyalaya and Kendriya Vidyalaya.
- To compare the academic achievement of female students of Jawahar Navodaya Vidyalaya and Kendriya Vidyalaya.
- To compare the intelligence of male students of Jawahar Navodaya Vidyalaya and Kendriya Vidyalaya.
- To compare the intelligence of female students of Jawahar Navodaya Vidyalaya and Kendriya Vidyalaya

Hypotheses of the study

On the basis of above objectives following hypotheses were formulated:

- There is no significant difference between the mean scores on academic achievement of JNV and KV students.
- There is no significant difference between the mean scores on intelligence of JNV and KV students.
- There is no significant difference between the mean scores on academic achievement of JNV and KV rural school students.
- There is no significant difference between the mean scores on academic achievement of JNV and KV urban school students.
- There is no significant difference between the mean scores on intelligence of JNV and KV rural school students.
- There is no significant difference between the mean scores on intelligence of JNV and KV urban school students.
- There is no significant difference between the mean scores of JNV and KV male students on academic achievement.
- There is no significant difference between the mean scores of JNV and KV female students on academic achievement.
- There is no significant difference between the mean scores of JNV and KV male students on intelligence.
- There is no significant difference between the mean scores of JNV and KV female students on intelligence.

Delimitation of the study

The study was delimited to 10th class students only.

- The study was covered only the students of Navodaya and KendriyaVidyalayas.
- The study has covered only Lakhimpur district, Assam.
- The study was limited on academic achievement and intelligence only.

Method

Descriptive survey method was used for the present study.

Population of the Study

The population of the present study constitutes JNV and KV school students studying in class X of Lakhimpur district, Assam.

Sample

The sample of the study was taken through simple random sampling technique. The sample consisted of 120 students (60 JNV and 60 KV) from JawaharNavodayaVidyalaya and KendriyaVidyalaya in Lakhimpur district, Assam.

Tools

The following tools were used for the collection of the required data. Group Test of Mental Ability developed by Dr. S. Jalota (1976). It has 100 types multiple choice questions employing various types of sub-tests. The Board Examination marks of class 10th students obtained from the office of the respective institutions to measure the academic achievement.

Collection of Data

The investigator personally went to the school for administration of the test.

Statistical Analysis

The data are analyzed with the help of Mean, Standard Deviation and t-test.

Analysis and Interpretation of Data

The data were analyzed on the basis of academic achievement and intelligence.

Hypothesis 1: There is no significant difference between the mean scores of JNV and KV students on academic achievement.

From the **Table: 1** it is found that mean scores of academic achievement of JNV and KV students are 41.22 and 39.98 respectively. When t-test is applied to compare the mean scores of both the groups, it is found that the calculated t-value of 1.36 is less than the table value at 0.05 level of significance for df=118. Hence, the hypothesis "there is no significant difference between the mean scores on academic achievement of JNV and KV students" is accepted. This means that JNV and KV students have similar level on academic achievement.

Table 1. Mean, SD and t-value of JNV and KV students

	Type of School	N	Mean	SD	t-value	Level of Significance
Academic Achievement	JNV	60	41.22	4.59	1.36	Not Significant
	KV	60	39.98	5.33		

Table 2. Mean, SD and t-value of JNV and KV rural students

	Type of School	N	Mean	SD	t-value	Level of Significance
Academic Achievement	JNV	30	41.07	4.93	1.26	Not Significant
	KV	30	39.4	5.40		

Table 3. Mean, SD and t-value of JNV and KV urban students

	Type of School	N	Mean	SD	t-value	Level of Significance
Academic Achievement	JNV	30	40.33	3.78	0.85	Not Significant
	KV	30	41.27	4.76		

Table: 4 Mean, SD and t-value of JNV and KV male students

	Type of School	N	Mean	SD	t-value	Level of Significance
Academic Achievement	JNV	30	39.83	4.23	0.25	Not Significant
	KV	30	39.54	5.43		

Table 5. Mean, SD and t-value of JNV and KV female students

	Type of School	N	Mean	SD	t-value	Level of Significance
Academic Achievement	JNV	30	41.83	3.97	0.91	Not Significant
	KV	30	40.79	4.89		

Table 6. Mean, SD and t-value of JNV and KV students.

	Type of School	N	Mean	SD	t-value	Level of Significance
Intelligence	JNV	60	76.37	8.12		Significant
	KV	60	71.22	9.61	3.18	

Table 7. Mean, SD and t-value of JNV and KV rural students

	Type of School	N	Mean	SD	t-value	Level of Significance
Intelligence	JNV	30	76.93	8.58	2.66	Significant
	KV	30	70.73	9.47		

Table 8. Mean, SD and t-value of JNV and KV urban students

	Type of School	N	Mean	SD	t-value	Level of Significance
Intelligence	JNV	34	77.0	5.45	2.57	Significant
	KV	34	71.7	9.88		

Hypothesis 2: There is no significant difference between the mean scores of JNV and KV rural students on academic achievement.

From the **Table: 2** it is found that mean scores of rural JNV and KV students are 41.07 and 39.4 respectively. When the t-test is applied to compare the mean scores of both the groups, it is found that the calculated t-value 1.26 is less than the table value 2.00 at 0.05 level of significance. So, null hypothesis is accepted. This means that there is no significance difference between the mean scores on academic achievement of JNV and KV rural students.

Hypothesis 3: There is no significant difference between the mean scores of JNV and KV urban students on academic achievement. It is found that the mean value of urban JNV and KV students are 40.33 and 41.27 respectively.

So, hypothesis is accepted. This means that there is no significant difference between the mean scores of JNV and KV female students on academic achievement.

Hypothesis 6: There is no significant difference between the mean scores of JNV and KV students on intelligence.

From **Table: 6** it is found that the mean value of JNV students on intelligence is 76.37, which is higher than that of KV students, i.e. 71.22. The SD values are found 8.12 and 9.61 respectively. When the significance of difference between mean is computed, the t-value is found 3.18 which is significant at 0.05 level of significance. Thus, the result indicates that the intelligence of JNV students scored significantly higher than intelligence of KV students. Hence, hypothesis is rejected.

Hypothesis 7: There is no significant difference between the mean scores on intelligence of JNV and KV rural students.

Table 9. Mean, SD and t-value of JNV and KV male students

	Type of School	N	Mean	SD	t-value	Level of Significance
Intelligence	JNV	35	76.57	7.82	2.99	Significant
	KV	35	70.03	10.33		

Table 10. Mean, SD and t-value of JNV and KV female students

	Type of School	N	Mean	SD	t-value	Level of Significance
Intelligence	JNV	29	76.69	8.44	1.65	Not Significant
	KV	29	73.14	7.95		

When the t-test is applied to compare the mean scores of both the groups, it is found that the calculated t-value (=0.85) is less than the table value at 0.05 % level of significance. This means that the mean difference is not significant. Hence, the hypothesis is accepted. This further means that urban JNV and KV students have similar level on academic achievement.

Hypothesis 4: There is no significant difference between the mean scores of JNV and KV male students on academic achievement.

The above table shows that the mean score on academic achievement of male students of JNV is 39.83 and S.D is 4.23, whereas male students of KV is 39.54 and S.D is 5.43. The computed t-value between JNV male and KV male students on academic achievement is 0.25, which is not significant at 0.05 level of significance. Hence, the hypothesis is accepted. It means that there is no significant difference between the mean scores of JNV and KV male students on academic achievement.

Hypothesis 5: There is no significant difference between the mean scores of JNV and KV female students on academic achievement.

From the **Table: 5**, it is found that mean scores of JNV and KV female students are 41.83 and 40.79 respectively. When the t-test is applied to compare the mean scores of both the groups, it is found that the calculated t-value of 0.91 is not significant.

From the **Table: 7** it isfound that the mean score of JNV rural students on intelligence is 76.93 and S.D is 8.58. The mean score of KV rural students on intelligence is 70.73 and S.D is 9.47. The t-value between JNV and KV rural students on intelligence is 2.66 for 58df, which is significant at 0.05 level of significance. Hence, hypothesis is rejected. It means that there is significant difference between the mean scores of JNV and KV rural students on intelligence.

Hypothesis 8: There is no significant difference between the mean scores of JNV and KV urban students on intelligence.
It isfound that mean value of JNV urban students on intelligence is 77.0 and that of KV urban students on intelligence is 71.7. The computed t-value is 2.57 which is more than the table value. The mean difference is found to be significant at 0.05 level. So, the hypothesis is rejected. It reveals that there is significant difference between the mean scores of JNV and KV urban students on intelligence.

Hypothesis 9: There is no significant difference between the mean scores of JNV and KV male students on intelligence.
The table value shows that mean value of JNV male students on intelligence is 76.57, whereas that of KV male students is 70.03. The computed t-value is 2.99, which is significant. So, the hypothesis is rejected. It reveals that there is significant difference between the mean scores of JNV and KV male students on intelligence.

Hypothesis 10: There is no significant difference between the mean scores of JNV and KV female students on intelligence.

Table: 10, the computed t-value between the scores of JNV and KV female students on intelligence is 1.65 which is not significant. Hence, the hypothesis is accepted. Thus, the result reveals that there is no significant difference between JNV and KV female students on intelligence.

Findings of the Study

After statistical analysis of the data, the researcher arrived at the following findings. There is no true difference between the students of JNV and KV on academic achievement. There is no true difference between JNV and KV students for both males and females on academic achievement. There is no true difference between JNV and KV rural and urban students on academic achievement. There is no significant difference between JNV and KV female students on intelligence. There is significant difference between the students of JNV and KV on intelligence in the whole sample.   There is significant difference between the students of JNV and KV rural and urban students on intelligence. There is significant difference between JNV and KV male students on intelligence. The findings of investigation may provide help to the school personnel, teachers and counselors to develop suitable methods of teaching and innovative instructional designs to learners their intellect further and motivate them for excelling in their academic performance.

Conclusion

Though no specific attempt is made to compare the students of JNV and KV, but there exists relationship between intelligence and academic achievement as shown by the studies quoted in review of related studies. The JNVs are created with a specific purpose to provide educational facilities for the talented rural children with hostel facilities and probably due to their academic level their scores on both the variables are higher than that of KVs.

REFERENCES

Begum, T. S. and Phukan, M. 2001. "Academic Achievement and Intelligence – A Correlation Study in Boys and Girls", *Indian Psychological Review*, Vol 56, No. 2, Agra, pp 103-106.

Chamundeswari, S. and Vaidharani, V.S. 2006. General Mental Alertness and Intelligence in relation to academic achievement of students at the secondary level, Journal of Educational Research and Extension 43 No. 2, Coimbatore, April-June 2006, pp 32-45.

Chandra, R. and Azimmudin, S. 2013. "Influence of intelligence and Gender on Academic achievement of Secondary School Students of Lucknow city", IOSR *Journal of Humanities and Social Sciences,* ISSN-2279-0837, Vol.17, Issues 5, PP 9-14

Chaudhary, V. 2004. "A Comparative Study of Intelligence and Academic Achievement of the Secondary School Students", *Indian Psychological Review*, Vol.62, No.4, Agra, pp 177- 181.

Chetia Pranab, Soni, J.C. and DuttaJadab, 2014. "A Comparative Study of Delinquency Prone and Non-Delinquency Prone A dole scents with Regard to Self-Concept, Emotional Maturity and Academic Achievement in Assam". Published in EDULIGHT Multi - Disciplinary, Bi-annual & Peer-Reviewed Journal, Kalyani, Nadia,WestBengal-741235, India, ISSN:2278-9545,vol.3, Issue5, May.

Dutta. Jadab, Chetia, Pranab and Soni, J.C. 2015. "A Comparative Study on Intelligence of Secondary School Students in Lakhimpur District of Assam". *Published in International Journal of Development Research,* ISSN:2230-9926,vol.5,Issue.09,pp.5594-5599,September.

Dutta. Jadab, Rajknower. Suresh and Soni, J .C, 2014. "A Comparative Study on Intelligence of Secondary School Students in Sonitpur District of Assam". Published in *International Journal of Current Research*, ISSN:0975-833X,Index CopernicusValue:6.24, Impact Factor:5.349, 2016.

Dutta. Jadab, Rajknower. Suresh and Soni, J.C. 2015. "A Comparative Study on Intelligence of Secondary School Students in Lakhimpur and Sonitpur Districts of Assam". Published in Contemporary Research Spectrum – Multidisciplinary Refereed Journal under the aegis of Council OO Edulight – A Researchers 'Organization, West Bengal-741235, India, ISSN 2278-9545, Issue – 1, Number -1, September.

Garrett, H.E. 1968. General Psychology, New Delhi, Eurasia Publication House, (Ind. Reprint).

Hawes, G.R. and Hawes, L.S. 1982. "The Concise Dictionary of Education", New York: Van Nastrand Reinhold Company.

Jalota, S. 1976. Group Test of Mental Ability Scale: Agra, *National Psychological Corporation*.

Koul, L. 1997. Methodology of Educational Research, New Delhi: Vikash Publishing house Pvt.Ltd.

Mondal Bijoy, Soni, J.C. and DuttaJadab, 2014. "Evaluation of Social Science Curriculum at Elementary Stage in Assam". Published in EDULIGHT Multi-Disciplinary, Bi-annual and Peer – Reviewed Journal, Kalyani, Nadia, West Bengal-741235, India, ISSN: 2278-9545,vol.3, Issue 6, Nov, pp-186-196.

Nalini, H.K. and Ganesha Bhatta, H.S. 2009. "Study Habits and Students Achievement in Relation to Some Influencing Factors", Edutracks, Vol. 9, No.2, Hyderabad, October, pp 26-32.

Panda, M. 2005. "Correlation between Academic Achievement and Intelligence of Class IX Students", Edutracks, Vol. 5, No.1, Hyderabad, September, pp 36-37.

Panigrahi, M.R. 2005. "Academic Achievement in Relation to Intelligence and Socio-Economic Status of High School Students", Edutracks, October, Vol. 5, No 2, Hyderabad, pp 26-27.

Parveen, Danista 2014. "Relationship between Intelligence and Academic Achievement of Secondary Level Students", *Global Journal for Research Analysis*, ISSN: 2277-8160, vol.3, Issue: 3 pp 35-36

Piaget, J. 1963. The Psychology of Intelligence: New York; Routledge, pp.6-7.

Rajknower Suresh, Soni, J.C and Dutta Jadab, 2014 ."A Study of Adjustment, Level of Aspiration, Self-Concept and Academic Achievement of Visually Handicapped School Children of Assam". Published in International Journal of Development Research, ISSN:2230-9926,vol.4, Issue.4,pp.902-907, April.

Rajknower. Suresh, Dutta. Jadab and Soni, J.C. 2013. "Adjustment and Academic Achievement of Visually Handicapped School Children in Assam". Published in International Journal of Science and Research (IJSR), ISSN (Online) :2319-7064, Index Copernicus Value:6.14, Impact Factor (2013): 4.438,vol.4, Issue.4, April, 2015,pp.1228-1235.

Stern, W. 1914. Psychological Methods of Testing Intelligence, Baltimore, Warwick and York Inc, p.3

Thurstone, L. 1963. The Nature of Intelligence: London, Routledge, p.159

Wechsler, D. 1958. The Measurement of Adult Intelligent: New York, Williams and Wilkins Co, p.3.

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