

ACADEMIC ACHIEVEMENT AND INTELLIGENCE AMONG SCHOOL STUDENTS

Suman Kumari Katoch, Ph. D.

Assistant Professor, Department of Education, MLSM PG College, Sundernagar, Himachal Pradesh.

Abstract

Education instill in the child a sense of maturity and responsibility by bringing in him the desired changes according to his needs and demands of ever changing society, of which he is an integral part. The descriptive method of research was justified in view of the objective of the study. All the students of 10th class of district Shimla constituted the population of the study. From the selected district, 10 schools (5 - rural area school and 5 - urban area school) were taken on the basis of random sampling. In the third step 22 students were drawn randomly from 10th class of each school. The total sample was consists of 220 hundred urban and rural students. The investigator used General Mental Ability Test for data collection. The t-test statistical technique was used in this study. The rural and urban students do not differ significantly on the variable of academic achievement and intelligence.

Keywords: *Education, Community, Academic Achievement and Intelligence.*



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Introduction

The cognitive growth and academic development of the individual has become a matter of concern for the psychologist, sociologists and educationist, day by day achievement elated problems are increasing. There is growing awareness of developing way and approaches for improving children's scholastic achievement. Education is as old as the human race. It is a never ending process of inner growth and development and its period stretches from cradle to the grave. Speaking generically, the term 'education' signifies the sum total of processes by means of which a community or social group whether small or large transmits its acquired power and aim with a view to securing its own continuous existence and growth. The necessity of education rests upon a few simple basic facts. These are the difference of level between the mature and immature members of a society and the facts of birth and death. Education means enabling the mind of find that ultimate truth which emancipate us from the bandage of dust and gives us the wealth not of things but in inner light, not of power but if love, making the truth its own and giving expression to it. Education is the deliberate and systematic influence, exerted by the mature person upon the immature, though

instruction, discipline and harmonious development of physical, intellectual, aesthetic, social and spiritual powers of the human beings, according to social and individual needs and directed towards the union of the educated with his creator as defined end. Education may be defined as the process of continuous reconstruction of experience with the purpose of widening and deepening its social content. It is always development of desirable habits, skills, intelligence, attitude and aptitude that makes an individual a good citizen. Education is concerned with learning and the academic achievement is the outcome of general and specific experience. Achievement is the degree of levels of success attained in some general or specified area. Achievement of the learners is the performance in the series of test for a given skill or knowledge, usually academic, it is the outcome of general and specific learning experience, which are assessed by the school (authorities) with the help of standardized or teacher made test. It also involves the self-appraisal by the student and the teacher of their success and failure from time to time with a view to continuous improvement so that education becomes dynamic and self-developing. The concept of achievement was put forth by Murry in 1938 to make it practically important in education. Academic achievement is of paramount importance, practically in the present socio-economic and cultural contexts. 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 aspiration of equality. Academic achievement is defined as the main achievement score in the examination of each subject i.e. curriculum of the students taught by the teacher. Academic achievement is the core of the wider term educational growth, which includes growth in all subjects. It refers to the pupil knowledge, attained as skills development with the help of achievement tests in the form of examination. Academic achievement is the attained ability or degree of competency in school tasks usually measured by standardized tests and expressed in grades or base on norms derived from a wide sampling of pupils performance. The effectiveness of any educational system is ganged to the extent the pupils are involved in the system achieved be it in cognitive or conative or psychomotor domain. The school performances of each student functions as selection and differentiation among students on the basis of their scholastic and other attainments and open out avenues for advancement. His/her personal status is inevitably a direct function of the position he/she achieves, mainly in the class room setting. One of the most concerns of education is to ensure

that each child is able to make most of his abilities. Thus, achievement in education implies one's knowledge, understanding and skills in a specified subject or group. Achievement may also be defined as the performance of the students in the classroom situations as well as the extent to which the instructional objectives have been achieved. Assessment of learner's academic achievement serves a variety of purposes. For example, the past records of the student may illuminate his present status. Extremely good or poor marks may be indicative of usual traits of a boy or girl. It forms the basis of admission to various courses as well as promotion to higher classes. It reveals the strengths and weaknesses of an individual in a specific area. Thus, academic achievement is the centre around which our education system revolves. It refers to the degree of mastery in certain areas of study attained in a prescribed time and measured by the standardized test or teacher-made test. Academic achievement has been considered to be one of the most important factors in life as the future planning for higher studies or the vocational choices depends upon the outcomes of the students i.e., their marks or grades. As the education process aims at the enhancement of the level of academic achievement of the students along with aiming at the fullest development of the individual according to his abilities and interests. It is very important to ensure that students acquire the requisite competence so as to benefit most out of higher education setting the stage for the achievement of the youth is thus a fundamental obligation of the educational system at the school stage. Academic achievement of an individual is so far considered to be influenced in part by his ability to make adjustment to his environment in part by his special abilities like intelligence, study habits, attitude, aptitude, interest etc. which are the integral part of his personality and in part by the intensity and motives which serve as the impelling focus for his abilities.

Review of Related Literature

The review of the literature enables us to know the means of getting to the frontier in the field of our problem. On the other hand, personality characteristics have time and again been found to be conducive to success in the academic field. Studies that have tried to probe into the relationship of certain personality variables with academic achievements and intelligence are; Chadna and Sunanda (1990) found that there was positive and significant correlations between intelligence and academic achievement and I.Q. highly correlated with intelligence I.Q. and academic achievement 0.60 at 0.01 level of significance. Sood (1991) had searched for

personality factors reveals that easy going or outgoing, high intelligence, emotionally stable, mature, rule bound attained higher academic achievement. Gupta and Mukerjee (1994) reported that intelligence was positively and significantly related with academic achievement and the magnitude of correlation varied from 0.61 (urban girls) to 0.35 (rural boys). Kapoor (1996) in a study on creative thinking ability of high school pupils found that high and low achievers do not differ in creativity. Lin (1999) revealed in his study that the principal's leadership did not have a significant correlation with school effectiveness as measured by students' academic achievement. Deshmukh (2000) concluded that the extreme groups of high and low intelligence do not significantly differ in academic achievement. Woitaszewski (2001) studied the contribution of emotional intelligence to the social and academic achievement of gifted adolescents. Boon, Susan (2002) had concluded that there was no significant correlation exists between parental processes and reading achievement. Habibollah, Abdullah and Tengku (2008) noted that there is gender difference on intelligence. Rand (2009) have found that trait hope predicted academic achievement, both when considered as part of a 'positive thinking' second order personality factor (alongside either optimism or self-esteem and attributional style) or as a distinct variable (independent of measures verbal and numerical intelligence). MacCann (2011) found the relationship between performance measures of emotional intelligence coping styles, and academic achievement is sparse. Nwadinigwe and Azuka (2012) concluded that there is a positive relationship between emotional intelligence skills and academic achievement. Barwal (2013) revealed that boys and girls as well as rural and urban secondary school students are not differ significantly in their study habits but rural boys and urban boys, rural girls and urban girls are significantly differ in their study habits. Khurana (2014) found a positive correlation between study habits and academic achievement female University students possess more effective study habits and higher academic achievement than male University students. Boy scholars have better study habits and higher academic achievement than those hostel living students. Mimrot (2016) found that there is positive relationship of control; protectiveness; conformity; rewards; nurturance, permissiveness dimensions of home environment with academic achievement and other dimensions are negatively associated with academic achievement. The level of academic achievement is higher in girl students than boys' students.

Rationale of the Study

The need to undertake present study originated mainly because of the fact that the area “academic achievement” is quite important in the field of educational research. Thus, it becomes important to unravel the complex determinants of academic achievements. Academic achievement has been considered to be one of the most important factor in every individual life, as the future planning for higher studies or vocational choices depends upon the outcome of the students i.e., their marks or grades. Educational process aims at the enhancement of the level of academic achievement of the students along with aiming at the fullest personality development of the individual. Intelligence level and test anxiety are the two crucial personality traits which affect the academic achievement of the students. Related literature reveals that most of the studies were confined to explore the relationship of academic achievement with either test anxiety alone or intelligence alone or academic motivation or creative thinking. Very few studies have been conducted on the academic achievement in relation to intelligence level. In most of the studies the samples were selected from senior secondary schools i.e. either XI or XII, class students. Moreover the studies were conducted either on Government or private schools or both. It is typical to find rural urban differences in intelligence, academic achievements. In general, students in urban areas show higher academic achievements as well as high I.Q. than the rural areas students. In Coleman’s (1966) study these differences were found at all the different grade levels studied (grades 1, 3, 6 and 12) and on all the measures used in the study (Verbal ability, non-verbal, comprehension, reading, mathematics achievements and general information in practical sciences, arts, social studies and humanities). Hence, it becomes essential to study the effect of locality i.e., urban and rural areas on the academic achievements, intelligence level of 10th class students.

Objectives

The following objectives are framed for this study:

- To compare the academic achievements of 10th class rural and urban students of Shimla district.
- To compare the intelligence level of 10th class rural and urban students of Shimla district.

Hypotheses

The following hypotheses were formulated in this study:

- There will be significant difference in the academic achievements of rural and urban students of 10th class.
- There will be significant difference in the intelligence level of rural and urban students of 10th class.

Delimitations of the Study

The present study was delimited in the following aspects:

- The study was delimited to only one district of the Himachal Pradesh.
- Only Government high and senior secondary schools will be selected for the data collection in the present study.

Method and Procedure

Descriptive Method of research in the present case which is relevant and justified in view of the objective of the study was used. All the students of class 10 of district Shimla constituted the population of the study. Sampling is the basis of any scientific investigation. The sample for the present investigation was drawn in the manner described below: As a first step, one district of Himachal Pradesh was selected conveniently. From the selected district, 10 schools (5 – rural area school and 5 - urban area school) were taken on the basis of random sampling. In the third step 22 students were drawn randomly from 10th class of each school. The total sample was consists of 220 hundred urban and rural students. Every scientific research is processed through certain well designed tools. Tools are nothing but the instrument that helps the researcher to gather data. To collect the requisite data for the present study the investigator used General Mental Ability Test. In view of the objectives of the study, a statistical technique of t-test was used.

Analysis of Data

The data available on the selected variables were tabulated, analyzed and interpreted in the following manner. The data gathered from the sampled students were analyzed objectives wise using the relevant statistical techniques specified above. The details of the analysis of data collection from the selected sample on the variables of academic achievement and intelligence are presented as under.

Locality-wise Difference on Academic Achievements among 10th Class Students

The Table 1 present the t-value for 10th class high school rural and urban students in respect of variable of Academic Achievement along with N, Mean, SD and df.

Table 1 Comparison of Rural and Urban School Students with Respect to Academic Achievement

Group	N	Mean	SD	df	t-value
Rural	110	653.34	146.12	218	0.045
Urban	110	654.24	147.16		

It is revealed from Table 1 that t-value came out of be 0.045 which is not significant at 0.05 level of confidence. This indicates that rural and urban groups of high school students do not differ significantly. Hence, the hypothesis that, “The rural and urban students of 10th class differ significantly on the variable of Academic Achievement” is rejected. This means that academic achievement of rural and urban school students is almost equal.

Locality-wise Difference on Intelligence among 10th Class Students

The Table 2 present the t-value for 10th class high school rural and urban students in respect of variable of Intelligence along with Ns, Mean, SD and df.

Table 2 Comparison of Rural and Urban School Students with Respect to Intelligence

Group	N	Mean	SD	df	t-value
Rural	110	90.42	19.98	218	0.422
Urban	110	91.56	20.11		

It is revealed from Table 2 that t-value came out of be 0.422 which is not significant at 0.05 level of confidence. This indicates that rural and urban groups of high school students do not differ significantly in their Intelligence. Hence, the hypothesis that, “The rural and urban students of 10th class differ significantly on the variable of Intelligence” is rejected. This means that rural and urban school students is having almost equal level of intelligence.

Findings

On the basis of analysis and interpretation of data the following conclusions were drawn for the present study:

- The rural and urban students do not differ significantly on the variable of Academic Achievement.
- The rural and urban group of students does not differ significantly on the variable of Intelligence.

Educational Implications

Classroom environment should be healthy and tension free for high school students. The present study will act as a mirror to the educational planner's teachers, students and parents to bring at par the rural students in terms of their academic achievements intelligence level. The result of the study indicates that the 10th class students belonging to rural and urban areas do not exhibit a significant difference in their intelligence level of rural and urban students, to mention a few physical health, mental health, emotional stability, family background, nourishment, socio-economic factor, study habits, interests, attitude, potentialities of students, social groups, attitude of teachers towards students, teachers personality provision for guidance services, classroom environment, school infrastructure, achievement, motivation, parents education, geographical strata etc. The academic achievement of the students influenced by the intelligence level of the students, intelligence quotient bears a positive impact on the academic achievement of the students. The teacher should identify students with higher intelligence level, normal as well as low intelligence level. This enables the teacher to plan proper strategy for the students. Using variety of teaching strategies such a lecture method, lecture cum demonstration method, question answer strategies, brainstorming project method also helps in enhancing the intelligence level of students and developing self-confidence in them. A guidance service in school has now become of utmost important. As they help students in selection of proper educational courses as well as vocation is accordance with the need, capabilities as well as interest of the students, by this service a lot of wastage and stagnation of students can be overcome at right time. Educating parents-parents very often develops misconceptions about their children i.e., they either expect too much from their words or do not encourage their words achievements especially girls rural areas. Parents belonging to rural areas do not encourage their words, they do not know the value of education rather they prefer their words to help them at home and on fields. Urban students make good use of the available resources. They have well-furnished school buildings, well versed libraries and fully equipped laboratories. Rural students on contrary lack on these resources, the libraries are flooded with their curriculum books rather than books written by some other eminent author, dictionaries etc. it is the first and foremost duty of the government to properly implement the funds and policies made for rural schools. The fund should be used for educating rural students and in their benefit only. Guidance and

counselling centre should be opened in schools. So that students can avail helped to solve educational problems. Curriculum of the school should be authentic, job oriented, legitimacy, productivity etc. Organize various personality development programmes and arrange science exhibitions or educational tours

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