
A Comparative Study of Intelligence, Test Anxiety and Study Habits of Students Studying In Government and Non-Government Senior Secondary Schools

Dr. Anand Kumar*, Dr. Mohammad Ahsan, & Ms. Riyanka Negi*****

**Assistant Professor, Deptt. of Education, Shri Guru Ram Rai (PG) College, Dehradun, Uttarakhand, India*

***Assistant Professor, College of Applied Medical Sciences, University of Dammam, Dammam; KSA*

****Asst. Teacher, Govt. High School, Naugaon, Uttarkashi, Uttarakhand, India*

ABSTRACT

The study was designed to determine the significant differences if any amongst intelligence, test anxiety and study habits of students studying in government and non-government senior secondary schools. This study adopted descriptive correlation survey design methods. It involves comparison and contrast to discover the difference between existing non-manipulating variables. The sample size of this study was to 166 students studying in government and non-government senior secondary schools. The Verbal Intelligence test (VIT) constructed and standardized by R.K. Ojha and K. Ray Chowdhury, Test Anxiety Inventory Hindi (TAI– H) of Prof Ms. Anup Sud & Prerna Sud and Study habits inventory constructed and standardized by Dr. B.V. Patel has been used as the research tools for data collection. Investigator instructs to respond to all of the items. Students also provide their demographic details. For analyzing and interpreting the data the investigator used percentile analysis, mean, standard deviation and t-test as statistical techniques. The findings of this study show that non-government school's students are more intelligent than government college students are. As for as test anxiety and study habits concerned non-government school's students excel in both variables than government school's students.

Key Words: *Intelligence, test anxiety, study habits, government school and non-government school*

INTRODUCTION

Parents and teachers have always been concerned about their children's academic success and social adaptation both in and out of the classroom. Each student's its own characteristics and abilities that result from exposures, learning and development. Academic performance is one of the major factors that influence individual's success in any educational setting. Education is the most important means used in the process of developing the members of the society. The main purpose of educational affair is to know, through different methods and techniques, the achievement gained by the students; it is also known as academic achievement.

Intelligence is the power to think, understand, learn and decide. According to ancient Indian philosophers, the inner self of man has three parts: mind, intelligence and ego. Among them, the mind functions as a coordinator between external senses and intelligence. Due to coordination of the mind, the external senses become active and due to it, the intelligence becomes active. All the methods which have been so far developed to measure intelligence, measures only the mental activities of a person and on the basis of the same the intelligence

of a person is determined. However, the fact is that the person with sharp or high intelligence cannot succeed in all fields equally well, besides their intelligence; it also depends on their interest aptitude and intensity of their needs.

The test anxiety plays an important role for students to sustain the efficacy and usefulness of learning performance. Sansgiry and Sail (2006) defined test anxiety as the “reaction to stimuli that are associated with an individual's experience of testing or evaluative situations”. “Test Anxiety” in research literature, is a state of uneasiness, worry or feelings of uncertainty about an impending or ongoing evaluation programme. Test anxiety is the mental distress and fear experienced by students when they have to face examinations of any type (or) any of its related activities. Jerri Wine (1971) suggests that the performance difference between high and low test-anxious persons is due to loss of attentional focus during the task being performed. Culler and Holahan (1980) replicated the finding of past researches had shown that test anxiety is closely related with significant decrease in academic performance.

Study means to supply one's mental capacities to the acquisition of knowledge. Students of any grade level can have difficulty in school due to a lack of sufficient study skills (Gettinger & Seibert, 2002). There is no doubt that study habits can be improved step by step. Study habits are very easy to improve and habits are very important for the acquisition of knowledge. Even the most intelligent student cannot show their best if they do not possess sound study habits. Study habits serve as the vehicle of learning. Kholi (1977) pointed out that in the academic field, study habits are of particular theoretical and practical importance. In the manual of Rao's, study habits inventory, study habits defined as “the sum of all the habits, determined purposes and enforced practices that the individual uses in order to learn”. Here, the investigator means the same.

Different psychologists have accepted intelligence in the form of ability of different mental activities. Rammamurthi (1993) found that despite the students possessing good intelligence, their good academic achievement hampers due to the absence of good study skills. William and wood (1998) studied and found that the study power system improves the intelligence. Therapies used to reduce levels of test anxiety have been effective in doing so, but they have failed to improve academic performance (Dendato & Diener, 1986; Musch & Broder, 1999; Kirkland & Hollandsworth, 1980; Lent & Russell, 1978). Some studies have found that time management, as well as poor study habits, is one of the leading correlates of low academic performance (Sweidel, 1996). Research suggests that poor study habits are problem areas for some students which can lead to an increase in anxiety (Zeidner, 1998; Sweidel, 1996; Gettinger & Seibert, 2002; Britton & Tesser, 1991) and poor academic performance. This leads the investigators to find out the differences between test intelligence, anxiety and study habits on senior secondary school students.

METHODS

Research Design

This study adopted descriptive correlation survey design methods. It involves comparison and contrast to discover the difference between existing non-manipulating variables.

Population

In the present study, the population consists of 10,889 students from 12 governments and 12 are non-government senior secondary schools. All the students were studying in class XI, XII of Raipur Block in Dehradun.

Sample

The sample comprises of 166 students, selected by simple random sampling technique from government and non-government senior secondary school. The sample of the students consisted of 83 students from each types of school.

Table - 1

Type of School	Number of Students
Government	83 (50%)
Non- Government	83 (50%)
Total	166 (100%)

Research Tools

The **Verbal Intelligence test(VIT)** constructed and standardized by R.K. Ojha and K. Ray Chowdhury has been used for the study. The test inventory has 8-subcales for measuring “Classification, Analogies, Synonyms, Number Test, Completion Test, Paragraph Test, Best Reasons and Simple Reasons”. The test inventory consists of 112 statements; the response should be into right or wrong, one mark given for right and no marks given for wrong response. The maximum possible score on the inventory would be 112.

Test Anxiety Inventory Hindi (TAI– H) of Prof Ms. Anup Sud & Prerna Sud. This self-report inventory has been developed and standardized with large samples of high school and college students. It consists of two subscales for measuring “Worry” and “Emotionality” having eight items in each subscale. There are four buffer items in the scale. The internal consistency and test retest reliability of this TAI and its subscales are high. The range of possible scores for this instrument varies from a minimum score of 20 to maximum score of 80. The subject responds to each item by rating himself on a four-point rating scale, ranging from: 1) almost never to (2) sometimes, (3) often and (4) almost always. Subject was told to encircle the category which he/she felt appropriate for him/her generally under test like situations. In this, item number one is worded in such a manner that a rating of “4” indicates a low level of anxiety, while all other items are worded in such a manner that rating of “4” indicates high level of anxiety. The score weight for item number one is reversed where 1, 2, 3 and 4 is taken as 4, 3, 2 and 1. Scoring of all the items is done by adding up the respective numbers encircled by the subject, by keeping item number one in view as stated above.

Study habits inventory constructed and standardized by Dr. B.V. Patel has been used for the study to measure study habits. The test consists of 45 items and each statement based on five-point scale (1. Always, 2. Often, 3. Sometimes, 4. Hardly, 5. Never) with a view to getting more exact responses from students. In case of the statement depicting bad study habits, the score is to be assigned in reverse order. Thus the high score on the inventory will indicate good study habits and vice-versa. The maximum possible score on the inventory would be

225 and the least possible score would be 45. The students from this inventory will get marks between these two limits.

Administration of tools

All the instructions were given on each test form. The students read the directions silently and carefully before they put any answer or responses. Researcher instructs to respond to all of the items. They also have to fill their demographic details (names, gender, school types, location etc..) as required. Students fill all inventories with in fifty-fiveminutes' time span.

Statistical Design

The statistical analysis has been done with the help of Microsoft excel 2010. A t-test was applied to measure the significance difference between intelligence, test anxiety and study habits of students studying in government and non-government senior secondary schools.

RESULTS

The data was computed and tabulated in the following manner

Distribution of students based on level of Intelligence and type of schools

Table - 2

Types of school	Level of Intelligence			
	Low	Average	High	Total
Government	16 (9.64%)	56 (33.74%)	11 (6.63%)	83 (50%)
Non-Government	10 (6.02%)	56 (33.73%)	17 (10.24%)	83 (50%)
G. Total	26 (15.66%)	112 (67.47%)	28 (16.87%)	166 (100%)

It is evident from the above table that 9.64 % of the students studying in Government School have low level of Intelligence, 33.74% have an average level of Intelligence and the remaining 6.63% have high level of Intelligence. Similarly, 6.02% of the students studying in Non-government school have low level of Intelligence, 33.73% have an average level of Intelligence and the 10.24% have high Intelligence level.

Distribution of students on the basis of level of test anxiety and type of schools

Table- 3

Types of school	Level of Intelligence			
	Low	Average	High	Total
Government	15 (9.04%)	53 (31.93%)	15 (9.04%)	83 (50%)
Non-Government	06 (3.61%)	57 (34.34%)	20 (12.04%)	83 (50%)
G. Total	26 (12.65%)	110 (66.27%)	28 (21.08%)	166 (100%)

It is evident from the result that 9.04% of the students studying in government school having low level of test anxiety, 31.93% have an average level of test anxiety and the remaining 9.04% having high level of test anxiety. Similarly, 3.61% of the students studying in non-government school have low level of test anxiety, 34.34% have an average level of test anxiety and the remaining having high level of test anxiety.

Distribution of students on the basis of their study habits and type of schools

Table- 4

Types of school	Level of Intelligence			Total
	Low	Average	High	
Government	13 (7.83%)	60 (36.14%)	10 (6.02%)	83 (50%)
Non-Government	12 (7.23%)	53 (31.93%)	18 (10.84%)	83 (50%)
G. Total	25 (15.06%)	113 (68.07%)	28 (16.87%)	166 (100%)

From the above table it can be concluded that 7.83% students studying in government school having poor study habits, 36.14% having normal study habits and 6.02% have good study habits. In the same way, 7.23% students studying in non-government school have poor study habits, 31.93% have normal study habits and 10.84% have good study habits.

Comparison of level of intelligence of students studying in Government and non-government schools

Table- 5

Types of school	Intelligence			Level of significance
	M	SD	t-value	
Government N = 83	78.34	09.01	2.69	Significant at 0.01 Level
Non-Government N = 83	82.03	08.70		

Table No.5 shows that the level of intelligence of students in the form of Mean and SD computed on the basis of type of school i.e. Government and non-government. The mean and SD for the students of government schools are 78.34 & 09.01 respectively. Similarly, the mean and SD for the students of private schools were computed as 82.03 and 08.70 respectively. The difference between the mean values of the level of intelligence of students studying in Government and non-government Schools were compared using 't' test and 't' value is found to be 2.69 which is significant at 0.01 level of significance.

Comparison of test anxiety of the students studying at secondary level in government and non-government schools

Table - 6

Types of school	Test Anxiety			Level of significance
	M	SD	t-value	
Government N = 83	57.45	10.43	1.47	Not Significant
Non-Government N = 83	59.66	09.94		

Table No. 6 shows that the level of test anxiety of students in the form of Mean and SD computed on the basis of type of school i.e. Government and non-government. The mean and SD for the students of government schools are 57.45 & 10.43 respectively. Similarly, the mean and SD for the students of private schools were computed as 59.66 and 09.94 respectively. The difference between the mean values of the test anxiety of the students studying in Government and Non-Government School were compared using 't' test and 't' value is found to be 1.47, which is not significant.

Comparison of study habits of students studying at senior secondary level in government and non-government schools

Table - 7

Types of school	Study Habits			Level of significance
	M	SD	t-value	
Government N = 83	163.67	29.29	0.73	Not Significant
Non-Government N = 83	165.98	20.12		

Table No. 7 shows that the level of study habits of students in the form of Mean and SD computed on the basis of type of school i.e. Government and non-government. The mean and SD for the students of government schools are 163.67 & 29.29 respectively. Similarly, the mean and SD for the students of private schools were computed as 165.98 and 20.12 respectively. The difference between the mean values of the study habits of the students studying at senior secondary level in government and non-government schools were compared using 't' test and 't' value is found to be 0.73 which is not significant.

CONCLUSION

In order to improve the quality of education we must develop certain innovative strategies, which will enhance the educational standards. In addition to that from the student's side there

must be some important steps, which form the basis for their academic achievement. Here the investigators thought that students “academic achievement and their excellence in studies” depends mainly on two factors such as their study habits and their test anxiety. For this matter, it is the effort of teachers to develop good study habits among school students. If we develop the good study habits among the students their test anxiety will be diminished automatically. This study will help to identify the study related problems especially test anxiety which blocks the academic achievements and advancements. This study also enhances the learning strategies and helps one to develop good study habits. If the students develop proper study habit then they can overcome their test anxiety and can achieve more.

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