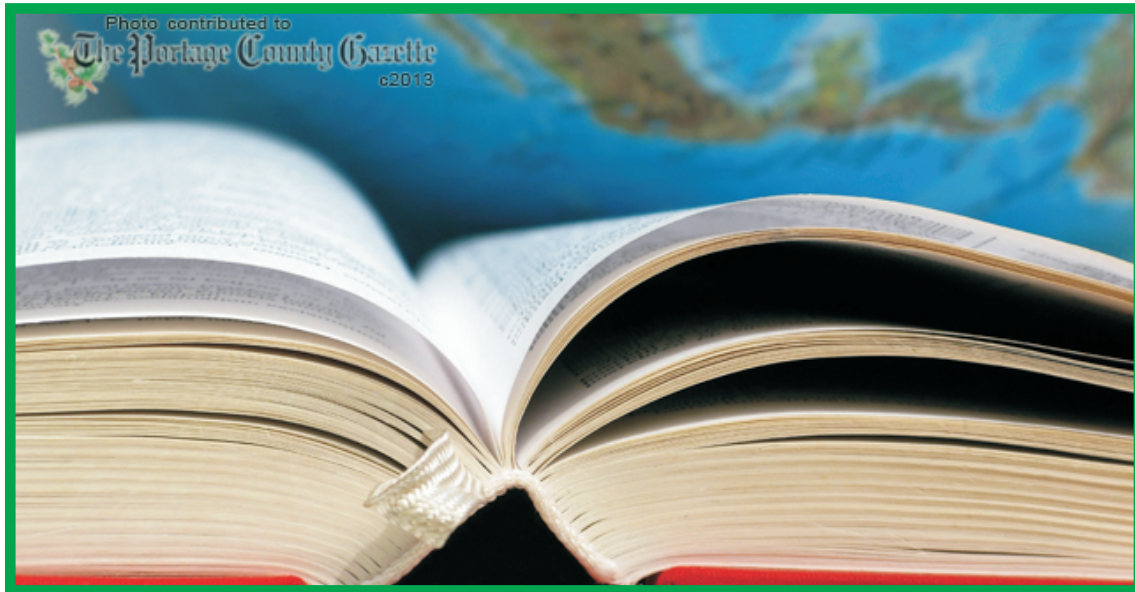


# GOLDEN RESEARCH THOUGHTS

## A STUDY OF IMPACT OF PRIVATE SCHOOL STUDENTS' INTEREST IN SCIENCE, STUDY HABITS AND SCHOOL ADJUSTMENT ON ACADEMIC ACHIEVEMENT IN SCIENCE.



**Ashokkumar B. Surapur**

Assistant Professor, Department Of Education, Karnataka State Women's University, Jnanashakti Campus, vijayapura Karnataka State .

### **Abstract :**

Education is the process of developing the capacities and potentials of the individual so as to prepare that individual to be successful in a specific society or culture. From this perspective, education is serving primarily as an individual development function. Education begins at birth and continues throughout life. It is constant and on going. Schooling generally begins some where between the ages four and six when children are gathered together for the purposes of specific guidance related to skills and competencies that society deems important.

**Keywords:** Perspective, empirical Evidences, pedagogy.

## A STUDY OF IMPACT OF PRIVATE SCHOOLSTUDENTS' INTEREST IN SCIENCE, STUDY HABITS AND SCHOOL ADJUSTMENT ON ACADEMIC ACHIEVEMENT IN SCIENCE.

### INTRODUCTION

In the past, once the formal primary and secondary schooling was completed the process was finished. However, in today's information age, adults are quite often learning in informal setting throughout their working lives and even into retirement.

Science education is the field concerned with sharing science content and process with individuals not traditionally considered, part of the scientific community. The target individuals may be children, college students, or adults, or adults within the general public. The field of science education comprises science content, some social science, and some teaching pedagogy. The standards for science education provide expectations for the development of understanding for students through the entire course of their education. The traditional subjects

### 3.7 Rationale for the Study – Empirical Evidences for the Selected Variables

The rationale for the study is briefly presented in the following headings:

The research studies conducted so far in the area of students Interest in science, Study habits, School adjustment and Academic achievement in Science form the basis for setting objectives and hypotheses for the present study. Thus, the critical appraisal of the related studies is presented below;

#### i. Interest in Science

**Malmlok-Naaman, Rachel (2011)** Studied why some students in the 10th grade do not choose to major in any of the science disciplines and how to arouse their interest in science and revealed that i) Despite the fact that 10th grade students studied science for three years in junior high school, many of them were unfamiliar with basic concepts that appeared in the science syllabus; and ii) the degree of interest shown by students in a given subject was greater when they were familiar with the subject and thus wished to hear and know more about it.

**Hulleman (2009)** Studied Promoting Interest and Performance in High School Science Classes and revealed that i) relevance intervention, which encouraged students to make connections between their lives and what they were learning in their science courses, increased Interest in science and course grades for students with low success expectations; and ii) the results have implications for the development of science curricula and theories of motivation.

**Singh (2011)** examined academic achievement and study habits of higher secondary students and revealed that; i) The results indicates that girls and boys differs significantly in their study habits and academic achievement; and ii) It also clears that good co-relation in study habits and academic achievement.

**Bhan and Gupta (2010)** studied that study habits and academic achievement among the students belonging to scheduled caste and non-scheduled caste group and revealed that; i) Sex has no significant impact on the study habits and academic achievement of students; and ii) Caste has significant impact on the study habits and academic achievement of students.

#### ii. Study Habits

**Saroja Gudalur (2010)** Studied an effect of mental health, social adjustment and socio-economic status on academic achievement of secondary school students and revealed that i) Interaction effect of high and low mental health, high and low school social adjustment and high and low socio-economic status of IX standard students are not found significantly on total academic achievement and in school subjects; and ii) The girl students have high mental health and high school social adjustment than the boys students of IX standard.

**George (1966)** studied comparative study of the adjustment and achievement of 10 years and 11 years schooling in Kerala state and found that, the pupils with high intelligence were identified as better adjusted and higher achievers in all the groups studied.

### Objectives

The present study was designed with the following objectives in view:

1. To study the effect of Private school students' Interest in science on Academic achievement in science
2. To study the effect of Private school students' Study habits on Academic achievement in science
3. To study the effect of Private school students' School adjustment on Academic achievement in science
4. To study the interaction effect of Private school students' Interest in science and Study habits on Academic achievement in science
5. To study the interaction effect of Private school students' Interest in science and Schooladjustment on Academic achievement in science
6. To study the interaction effect of Private school students' Study habits and School adjustment on Academic achievement in science.
7. To study the interaction effect of Private school students' Interestin science, Study habits and School adjustment on Academic achievement in science

## A STUDY OF IMPACT OF PRIVATE SCHOOLSTUDENTS' INTEREST IN SCIENCE, STUDY HABITS AND SCHOOL ADJUSTMENT ON ACADEMIC ACHIEVEMENT IN SCIENCE.

### Hypotheses

In pursuance of the objectives 1 to 7 the following null hypotheses were set up:

1. Effects of higher and lower Interest in science of Private school students differ significantly in terms of their influence on Academic achievement in science.
2. Effects of high and low Study habits of Private school students differ significantly in terms of their influence on Academic achievement in science.
3. Effects of high and low School adjustment of Private school students differ significantly in terms of their influence on Academic achievement in science.
4. Interaction effects of Private school students' Interest in science X Study habits differ significantly in terms of their influence on Academic achievement in science.
5. Interaction effects of Private school students' Interest in science X School adjustment differ significantly in terms of their influence on Academic achievement in science.
6. Interaction effects of Private school students' Study habits X School adjustment differ significantly in terms of their influence on Academic achievement in science.
7. Interaction effects of Private school students' Interest in science X Study habits X School adjustment differ significantly in terms of their influence on Academic achievement in science.

### Research Design of the Study

The present study is the descriptive study where a survey will be undertaken to measure the scores on Interest in science, Study habits and School adjustment of students of IXth Standard studying science subject with regard to their interaction effect on Academic achievement in science.

### Methodology

#### Sample

In the selection of sample from IXth standard, the method of random sampling technique was used. 300 Government School students studying science subject belonging to Bijapur District-constituted the sample for the study.

#### Tools

- 1) Science Interest Test(SIT) developed by L. N. Dubey and Archana Dubey (2002).
- 2) Study Habit Inventory (SHI) Constructed by M. Mukhopadhyay and D. N. Sansanwal (1983).
- 3) Adjustment Inventory for School Students (AISS) developed by A.K.P. Sinha and R.P.Singh (2007).
- 4) Academic achievement in Science.

Academic achievement in science developed and standardized by the investigator. The co-efficient of reliability was found to be 0.8817 which is significant at 0.05 level and consistency of reliability was found to be 0.8665 which is significant at 0.05 level.

### Procedure

Data pertaining to students Interest in science, Study habits and School adjustment and Academic achievement in science were collected by administering the above tools to the 600 students studying in IXth standard of Bijapur district.

### Results

The data were analyzed using 3-way ANOVA technique with a view to identify independent and combined effect of selected variables on Academic achievement. The results of the analysis are given in Table-1 and 2.

#### Analysis of Data Pertaining to 'Private School Students'

**Table – 1 Summary Table of ANOVA with Respect to 'Private School Students'**

## A STUDY OF IMPACT OF PRIVATE SCHOOLSTUDENTS' INTEREST IN SCIENCE, STUDY HABITS AND SCHOOL ADJUSTMENT ON ACADEMIC ACHIEVEMENT IN SCIENCE.

Source of Variation	df	Sum of Squares	Mean of Sum of Squares	F - RATIOS	P - Value	Significance
<b>Main effects</b>						
Interest in science (A)	1	3927.14 14	3927.14 14	864.5748	<0.01	S
Study habits (B)	1	1188.40 64	1188.40 64	261.6321	<0.01	S
School adjustment (C)	1	1208.99 34	1208.99 34	266.1644	<0.01	S
<b>2 way interactions</b>						
I. Science x S. Habits (A x B)	1	6.9023	6.9023	1.5196	>0.05	NS
I. Science x S. Adjustment (A x C)	1	67.4005	67.4005	14.8385	<0.01	S
S. Habits x S. Adjustment (B x C)	1	72.6895	72.6895	16.0029	<0.01	S
<b>3 way interactions</b>						
I.Sc x S. Habit X S.Adjust (A x B x C)	1	8.6363	8.6363	1.9013	>0.05	NS
Error	41 2	1871.41 96	4.5423			
Total	41 9	8351.58 94				

NS=Not Significant

### Findings

- Private school students with higher Interest in science have more influence on Academic achievement in science than the Private school students with lower Interest in science.
- the Private school students with high Study habits have more influence on Academic achievement in science than the Private school students with low Study habits.
- the Private school students with high School adjustment have more influence on Academic achievement in science than the Private school students with low School adjustment.
- There is no significant difference between the interaction effects of higher/lower Interest in science and high /low Study habits of Private school students in terms of their influence on Academic achievement in science.
- There is a significant difference between the interaction effects of higher/lower Interest in science and high/low School adjustment of Private school students in terms of their influence on Academic achievement in science.
- There is a significant difference between the interaction effects of high /low Study habits and high/low School adjustment of Private school students in terms of their influence on Academic achievement in science.
- There is no significant difference between the interaction effects of higher/lower Interest in science, high/low Study habits and high/low School adjustment of Private school students in terms of their influence on Academic achievement in science.

### Multiple Comparison of Means – ‘Private School Students’

Scheffe's simultaneous confidence intervals for all possible treatment groups pertaining to the Private school students are given below:

**Table - 2 : Comparison of Means of Treatment Groups on Private School Students' - Scheffe's Simultaneous Confidence Intervals**

Sl. No.	Comparison of treatment groups	Corresponding means		Simultaneous Confidence Intervals		P-value	Significance
1	a <sub>1</sub> c <sub>1</sub> a <sub>1</sub> c <sub>2</sub>	56.40	53.47	2.3859	3.4784	<0.05	S
2	a <sub>1</sub> c <sub>1</sub> a <sub>2</sub> c <sub>1</sub>	56.40	50.39	5.3645	6.6590	<0.05	S
3	a <sub>1</sub> c <sub>1</sub> a <sub>2</sub> c <sub>2</sub>	56.40	45.65	10.2258	11.2873	<0.05	S
4	a <sub>1</sub> c <sub>2</sub> a <sub>2</sub> c <sub>1</sub>	53.47	50.39	2.3571	3.8021	<0.05	S
5	a <sub>1</sub> c <sub>2</sub> a <sub>2</sub> c <sub>2</sub>	53.47	45.65	7.2040	8.4448	<0.05	S
6	a <sub>2</sub> c <sub>1</sub> a <sub>2</sub> c <sub>2</sub>	50.39	45.65	4.0339	5.4557	<0.05	S
7	b <sub>1</sub> c <sub>1</sub> b <sub>1</sub> c <sub>2</sub>	55.77	50.99	4.2505	5.3089	<0.05	S
8	b <sub>1</sub> c <sub>1</sub> b <sub>2</sub> c <sub>1</sub>	55.77	51.02	4.1810	5.3127	<0.05	S
9	b <sub>1</sub> c <sub>1</sub> b <sub>2</sub> c <sub>2</sub>	55.77	48.13	7.0457	8.2426	<0.05	S
10	b <sub>1</sub> c <sub>2</sub> b <sub>2</sub> c <sub>2</sub>	50.99	48.13	2.2325	3.4964	<0.05	S
11	b <sub>2</sub> c <sub>1</sub> b <sub>2</sub> c <sub>2</sub>	51.02	48.13	2.2343	3.5603	<0.05	S

### Note:

- Comparison of other treatment groups of Private school students were found to be not significant.
- Higher the mean scores indicates higher influence of independent variables on dependent variable.

## A STUDY OF IMPACT OF PRIVATE SCHOOLSTUDENTS' INTEREST IN SCIENCE, STUDY HABITS AND SCHOOL ADJUSTMENT ON ACADEMIC ACHIEVEMENT IN SCIENCE.

### Findings:

1. The Private school students with higher Interest in science and high School adjustment have more influence on Academic achievement in science than the Private school students with higher Interest in science and low School adjustment.
2. The Private school students with higher Interest in science and high School adjustment have more influence on Academic achievement in science than the Private school students with lower Interest in science and high School adjustment.
3. The Private school students with higher Interest in science and high School adjustment have more influence on Academic achievement in science than the Private school students with lower Interest in science and low School adjustment.
4. The Private school students with higher Interest in science and low School adjustment have more influence on Academic achievement in science than the Private school students with lower Interest in science and high School adjustment.
5. The Private school students with higher Interest in science and low School adjustment have more influence on Academic achievement in science than the Private school students with lower Interest in science and low School adjustment.
6. The Private school students with lower Interest in science and high School adjustment have more influence on Academic achievement in science than the Private school students with lower Interest in science and low School adjustment.
7. The Private school students with high Study habit and high School adjustment have more influence on Academic achievement in science than the Private school students with high Study habit and low School adjustment.
8. The Private school students with high Study habit and high School adjustment have more influence on Academic achievement in science than the Private school students with low Study habit and high School adjustment.
9. The Private school students with high Study habit and high School adjustment have more influence on Academic achievement in science than the Private school students with low Study habit and low School adjustment.
10. The Private school students with high Study habit and low School adjustment have more influence on Academic achievement in science than the Private school students with low Study habit and low School adjustment.
11. The Private school students with low Study habit and high School adjustment have more influence on Academic achievement in science than the Private school students with low Study habit and low School adjustment.

### Educational Implications

- i. Teaching science with using scientific aids available in school or improvised by the teacher will help in better understanding and development of scientific and skills.
- ii. Programmes for the improvement of study skills be developed by practicing teachers at school, researchers and psychologists.
- iii. Study habits training programme should be preventive, it should not merely aim at helping only those who need remedial help Curriculum should be according to level, interest and aptitude of the students.

### BIBLIOGRAPHY

- ☒ Agubost, L. A. (2010). Effects of Socio-economic Status on Academic Performance of Senior Secondary in Logos Metropolis. An Unpublished Masters thesis. Faculty of Education, Chicago: University of Logos.
- ☒ Aluja, A. Balleste, J. & Torrubia, R. (1999). Self-reported personality and school achievement as predictors of teachers Perceptions of their students. *Personality and Individual Differences*, 27, 743- 753.
- ☒ Butch, M. B. (1986). *Third Survey of Research in Education*. New Delhi: NCERT Publication.
- ☒ Hiremath, C. V. (2011). An Interaction Effect of Students School Adjustment, Attitude and Socio-Economic Status on Academic Achievement in Science Among Secondary School Students. Ph.D., Education, Dharwad : Karnatak University.
- ☒ Jyoti, A. P. & Ramakrishnaiah, D. (2000). The relationship between scholastic Achievement and Academic Adjustment of Junior International Students. *Journal of Psychological Research*, 44(2), 110-114.
- ☒ Sen, Barat Kalpana, (1992). An investigation into the Personality make-up, intelligence and study habit of high and low achievers. *Experiments in Education*, 25(1), 38-42.