



# REVIEW OF RESEARCH

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## STUDY THE RELATIONSHIP BETWEEN LEARNING INTEREST IN SCIENCE AND SCIENTIFIC ATTITUDE OF URBAN AND RURAL SECONDARY SCHOOL STUDENTS

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### ABSTRACT:

The purpose of the study is to **Study the Relationship between Learning interest in science and Scientific attitude of Urban and Rural secondary school students.** Sampling procedure adopted for the study The investigator by using stratified random sampling technique selected 800 students studying in high schools of six districts of Kalyana Karnataka. The findings concluded that; i) Learning interest in science and Scientific attitude of secondary school male students are dependent on each other. The Learning interest in science scores are increases or decreases with increase or decrease in Scientific attitude scores of secondary school male students.; ii) Learning interest in science and Scientific attitude of secondary school female students are dependent on each other. The Learning interest in science scores are increases or decreases with increase or decrease in Scientific attitude scores of secondary school female students.



**KEYWORDS:** Learning interest, Scientific attitude.

### INTRODUCTION

Science has been man's greatest ally since the dawn of civilization. It has created innumerable pathways to progress that has taken man from primitive life to the doorstep of advancement. The great achievements of science have made the present day world glorified to the extent that it has transformed the present civilization into scientific civilization. Life today is impossible without science.

The role of science is of utmost importance in raising the level of country from developing to advanced. All doors of economic growth and development pass through the gateway of scientific advancement. Pt. Jawaharlal Nehru was a firm believer of the crucial importance of science and technology for social transformation. He helped in laying a firm foundation of science education in our county. Science teaches children the necessary skills which they can use in other areas of their lives. Systematic exposure of science to children at early levels of education help in developing lifelong interest for the subject in them.

Young minds are creative, innovative and full of ideas. Science offers them with tremendous opportunities to face the challenges of material and social world. If we want our students to take those

opportunities and meet those challenges we must expose them to science subject since primary level of education and should be made compulsory till the secondary level.

The general observation reveals that not all students perform well in science subject during examination. It is still not clear as to what is the reason for this. Many believe that learning science is a matter of one's attitude and aptitude in science. How far it is true is an open question? The present research work intend to probe this very question.

### **Scientific Attitude and its Role in Achievement in Science:-**

Scientific attitude is the generalized disposition of any individual towards science, which can be measured in terms of its favorableness estimated from the scores obtained on a scientific attitude scale. The testing of scientific attitude involves the testing of components like curiosity, open-mindedness, faith in scientific methods, cause and effect relationship, critical mindedness, seeking evidence, objectivity, suspended judgment & aversion to superstition. In other words we can say that scientific attitude is a collective result of the above mentioned factors. Analyzing curiosity which is mentioned as a first factor to be judged while judging scientific attitude we can say that curiosity of a student towards any subject helps him or her to develop an inclination towards that subject. Curiosity towards subject of science indicates the quality of a student which helps in developing a quest amongst the students to know more about the subject. When there is a quest to know more there will be desire to study sincerely. The sincere study will automatically help to remember and assimilate. When the subject is learnt with interest and retained for a longer duration that will help the students to perform well in examinations.

Open Mindedness is considered as another parameter in judgment of scientific attitude in students. Open mindedness comes when your basic fundamentals are clear. To clear basic fundamentals there is a requirement of sincere devotion towards the subject. The subject of science is such that if one studies it with interest and understands it with logics the thought process becomes streamlined. With streamlined thought process and logical thinking comes the open mindedness which helps the students to get into the study of science devotionally to yield into best of the achievement results. With the open minded attitude one avoids getting inclined towards fake views and imaginary ideas and develops a faith in scientific methods. This faith automatically directs a student to know more and more in science subject and thus helps him/her to study more, analyze more and remember more. With a faith in scientific methods come the analytical power and the quality of critical thinking amongst the students. The students start analyzing the aspects they are studying and try and find cause and effect relationship with each and every topic they are studying. This interlinking of one topic to another while studying science, helps the students to involve in the subject. This involvement makes the retention of any topic last longer and yield to better achievement. Slowly and slowly the students develop objectivity. This develops logical thinking and inclination towards the past and present events in science.

When a student develops interest and tilt towards science subject he/she starts knowing about the scientific activities and the scientists involved in it and develops a scientific thinking. This directly or indirectly adds to cultural heritage of man.

In scientific pursuits it requires intellectual honesty at each step. Scientific attitude is the most important outcome of science teaching. Scientific attitude is a real significant concern of the process of science education. In this connection the rethinking of science education (Das, 1989) mentioned the characteristics of scientific attitude as "Open mindedness, a desire for accurate knowledge, confidence in procedure for seeking knowledge and the expectation that the solution of a problem will come through the use of verified knowledge".

### **OBJECTIVES OF THE STUDY**

- 1) To study the relationship between Learning interest in science of Scientific attitude of secondary school Urban students.
- 2) To study the relationship between Learning interest in science of Scientific attitude of secondary school Rural students.

**Null Hypothesis -**

- 3)  $H_{01}$  There is a significant relationship between Learning interest in science of Scientific attitude of secondary school Urban students.
- 4)  $H_{02}$ : There is a significant relationship between Learning interest in science of Scientific attitude of secondary school Rural students.

**METHODOLOGY**

The study adopts Descriptive survey method for investigation

**Sample**

The word population is different when used in research compared with the way we think about a population under normal circumstances. In research the word population has a different meaning. In sampling a population signifies the units that are interested in studying. The unit could be people, cases and pieces of data. For the present study stratified random sampling technique was adopted.

Sampling procedure adopted for the study The investigator by using stratified random sampling technique selected 800 students studying in high schools of six districts of Kalyana Karnataka.

**Tools**

1. Scientific Attitude Scale constructed by Dr. S. C. Gakhar and Dr. Amandeep Kaur.
2. Learning interest in science (LIIS) prepared and standardized by the Investigator.

**Statistical Techniques**

Mean and 'r' value

**Analysis and Interpretation**

- 1)  $H_{01}$ : **There is a significant relationship between Learning interest in science and Scientific attitude of Urban secondary school students.**

**Table-1: The r-value of scores of Learning interest in science and Scientific attitude of Urban secondary school students**

Variable	Type of sample	N	Mean	'r' Value
Urban secondary school students	Learning interest in science	400	224.35	0.967
	Scientific attitude	400	214.46	

A significant and positive relationship was observed between Learning interest in science and Scientific attitude of Urban secondary school students ( $r=0.967$ ,  $p<0.05$ ) at 5% level of significance. Hence, the null hypothesis is rejected and alternative hypothesis is accepted. It means that, Learning interest in science and Scientific attitude of Urban secondary school students are dependent on each other. In another words, the Learning interest in science scores are increases or decreases with increase or decrease in Scientific attitude scores of Urban secondary school students.

- 2)  $H_{02}$ : There is a significant relationship between Learning interest in science of Scientific attitude of Rural secondary school students.

**Table-2**

**The r-value of scores of Learning interest in science and Scientific attitude of Rural secondary school students.**

Variable	Type of sample	N	Mean	'r' Value
Rural students	Learning interest in science	400	179.34	0.965
	Scientific attitude	400	153.59	

A significant and positive relationship was observed between Learning interest in science and Scientific attitude of rural secondary school students ( $r=0.965$ ,  $p<0.05$ ) at 5% level of significance. Hence, the null hypothesis is rejected and alternative hypothesis is accepted. It means that, learning interest in science and Scientific attitude of rural secondary school students are dependent on each other. In another words, the Learning interest in science scores are increases or decreases with increase or decrease in Scientific attitude scores of rural secondary school students.

## DISCUSSION AND CONCLUSION

In this study, the researcher aimed to **Study the Relationship between Learning interest in science and Scientific attitude of Urban and Rural secondary school students**; i) Learning interest in science and Scientific attitude of secondary school urban students are dependent on each other. The Learning interest in science scores are increases or decreases with increase or decrease in Scientific attitude scores of secondary school rural students.; ii) Learning interest in science and Scientific attitude of secondary school urban students are dependent on each other. The Learning interest in science scores are increases or decreases with increase or decrease in Scientific attitude scores of secondary school rural students.

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