



A Study on Scientific Attitude of High School Students of Different Board in Tilda Block

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ORIGINAL ARTICLE



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"A STUDY ON SCIENTIFIC ATTITUDE OF HIGH SCHOOL STUDENTS OF DIFFERENT BOARD IN TILDA BLOCK" ABSTRACT This study examined the scientific attitudes of High School students of different board in Tilda block. In this study survey method of research is used. 150 high school students of different board are randomly selected from different school of Tilda block.

Abstract

This study examined the scientific attitudes of High School students of different board in Tilda block. In this study survey method of research is used. 150 high school students of different board are randomly selected from different school of Tilda block. The tool used for data collection was scientific attitude inventory developed by J.K. Sood and R.P. Sandhya. The level of scientific attitude is average in High School students of different board of Tilda block. There is no significant difference in the scientific attitude with respect to gender and boards of High school students.

Key Words

Scientific attitude, Board, High School students.

Introduction

Modern age is the age of science and technology. Science is the scientific way of gathering knowledge. In each board, High School level science is the compulsory subject. The main aim of teaching and learning of science is to develop positive scientific attitude in the students. It has also been verified and realized that without developing scientific attitude any amount of knowledge in science contribute very less in the development of nation and particular to the process of social change. Scientific attitude is the attitude of being objective in thinking and observation. A person having scientific attitude feels excited to see a new thing and hear a new ideas. He tries to know each and every content with proof. For living harmonious life in nature everyone needs scientific attitude.

Review of Literature

From the study of Rao Digumarti Bhaskara (1990) on “A comparative study of scientific attitude, scientific aptitude and achievement in biology at secondary level.” He found that in secondary school students studying in private school, rural school, English medium school and residential school held relatively better scientific attitude rather than their counter part.

From the study of **Chakraborty Sudipta and Gogoi Manashee** (2014) on “A study on scientific attitude of secondary school”. He was found that there is no significant difference in scientific attitude among

- a) Boys and Girls.
- b) Urban and Rural.
- c) Caste wise and medium wise students in secondary school of Dibrugarh districts.

Form the study of **Rani Kavitha** (2016) on “Scientific attitude of upper primary school students towards science living in Bhiwani districts of Haryana.” He found that there is no significant difference in scientific attitude of

- a) Boys and Girls.
- b) Urban and Rural students.

Objective of the Study

- a) To study the level of scientific attitude of high school students of different board of Tilda block.
- b) To compare the scientific attitude of
 - I. Male and Female
 - II. Different board students studying in High school of Tilda block.

Hypothesis

- H₁**: The level of scientific attitude of High School students of different board of Tilda block is high.
- H₂**: There is no significant difference in scientific attitude of Girls and Boys of High School of different board of Tilda block.
- H₃**: There is no significant difference in scientific attitude of different board students of High School of Tilda block.

Methodology and Procedure

- a) **Method:**
In this study I use survey method of research.
- b) **Population:**
The population of the present study comprises of students of class 10th in different board of Tilda block.
- c) **Sample:**
In the present study lottery random sampling method was used to select 150 students in secondary school of different board of Tilda block. Each board having 50 students.
- d) **Tools:**
A standard tools on scientific attitude scale developed by J.K. Sood and N.P. Sandhya was used to collect data. This scale contains 36 statements. Out of 36 statements, 18 are positive and rest 18 are negative. Total 6 (six) dimensions, namely rationality, curiosity, open mindedness. A version of superstition, objectivity of the intellectual beliefs and suspended judgment. The co-

efficient of reliability of it is 0.88 and validity 0.94. The researcher himself administered the scale among the High School students of different board of Tilda block.

e) **Statistical Technique:**

In this study mean, Medium, Mode, Standard deviation and bar graph, pie graph and Annova test are used.

f) **Scope and Delimitation:**

Only Tilda block urban student, Private School and class 10th students and English medium are selected for the present study.

Analysis of data

H₁: The level of scientific attitude of High School students of different board of Tilda block is high.

The score obtained by the students studying in class 10th of Tilda block of English medium in different board by administering the standardized tools in the appropriate condition as mentioned in the manual of tools. After collecting data we organized it and apply suitable statistical techniques.

Table 1.1 : Mean Score of Scientific Attitude

Variable	N	Mean	Median	Mode	Standard deviation
Students	150	130.13	130	137	
Boys	75	129.96	131	123	19.83
Girls	75	130.30	129	133	18.46
CG Board	50	129.28			
CBSE Board	50	131.46			
ICSE Board	50	129.66			

(Source : Primary Data)

Table 1.2 : Number of students of each board with level of Scientific Attitude

Class Interval	C.G.	CBSE	ICSE
75-99	5	3	4
100-124	15	12	14
125-149	23	28	27
150-174	7	7	5

(Source : Primary Data)

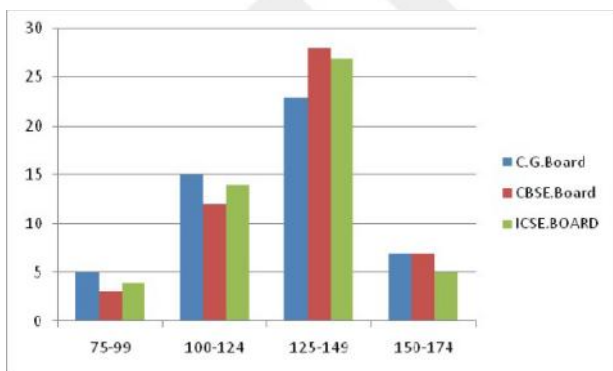


Fig. 1.1 Bar Graph of Scientific Attitude

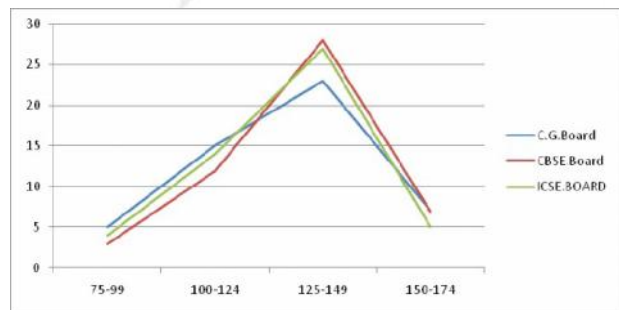


Fig. 1.2 Line Graph of Scientific Attitude

From Fig 1.1, 1.2 and table 1.1 & 1.2. It is clear that scientific attitude of low level have only 14.66% and of High level is of 12.66% Mostly student scientific attitude is moderate or average level. Hence the Hypothesis H₁ is rejected.

- H₁:** “The level of scientific attitude of High School students of different board of Tilda block is High is rejected. It is found that the level of scientific attitude of students of different board of High School is of average level.
- H₂:** There is no significant difference in scientific attitude of girls and boys of high school of different boards of Tilda block.

From table 1.1 the mean score of scientific attitude of boys and girls is approximately equal to 130 from the Annova of boys and girls.

Table 1.3 : Annova of Boys and Girls

Group	No. of Students	Total Sum	Mean	Variance
Boys	75	9747	129.96	393.41
Girls	75	9773	130.30	337.29

Variable	Sum of Squares	DF	Mean Square	F Value
Between the Groups	4.5067	1	4.51	0.0124
Within the Groups	53808.83	148	363.57	
Total	53813.33	149		

From this table the F value calculated is 0.0124 and which is less than the table value 3.90506 at 5%. Hence, F value is not significant at level 5%. Hence the null hypothesis is accepted at 5%. Therefore, there is no significant difference in scientific attitude of Boys and Girls of different board of High School in Tilda block.

- H₃:** There is no significant difference in scientific attitude of different board students of High School in Tilda block.

For the testing of this Hypothesis 50 students of each board from Urban school is selected and standard scientific attitude scale is administered on them and from the calculation of data following result is obtained.

Table 1.4 : Result of Annova of Scientific Attitude of Different Board Studens.

Group	No. of Students	Total score	Mean	Variance
CG Board	50	6464	129.28	448.98
CBSE Board	50	6573	131.46	317.15
ICSE	50	6483	129.66	329.33

(Source : Primary Data)

Variable	Sum of Squares	DF	Mean Square	F Value
Between the Groups	135.61	2	67.80607	0.1857
Within the Groups	53677.72	147	365.1546	
Total	53813.33	149	Not Significant	

From this table the F value calculated is 0.185 and which is less than table value 3.05.

Hence F value is not significant at level 1% Hence the null Hypothesis is accepted at 1% level. Therefore there is no significant different between scientific attitude of different board students in High school of Tilda block. The mean of student of each board is approximately equal.

Conclusion

It is found that the level of scientific attitude of different board students in high school of Tilda block is average. The mean score of scientific attitude is approximately same.

There is no significant difference in scientific attitude of

- a) Boys and Girls.
- b) Different board students of High School of Tilda block.

Very few students 13% approximately are of High scientific attitude.

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