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SCIENTIFIC ATTITUDE AND ACADEMIC ACHIEVEMENT AMONG HIGHER SECONDARY SCHOOL STUDENTS

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ABSTRACT: -

The present study is aimed to find out the relationship between scientific attitude and academic achievement of higher secondary school students. Survey method was used for the study. A random sample of 300 students was selected from XI standard in Krishnagiri district.



Data was analyzed by correlation co-efficient. Findings showed that there is moderate positive relationship between scientific attitude and academic achievement of higher secondary school students ($r=0.362$).

KEYWORDS: Scientific Attitude ,
Academic Achievement ,

correlation co-efficient.

INTRODUCTION :

Scientific attitude is the most important outcome of science teaching. The scientific attitude is defined as open mindedness, a desire for accurate knowledge, confidence in procedure for seeking knowledge and the expectation that the solution of the problems will come through the work of verified knowledge (Das 1989). Formation of scientific attitude is a process that begins right from the very beginning in the immediate environment provided by the parents, friends, neighbourhood school and society at large. Attitude held by individual may be simple or complex, stable or unstable, superficial or fundamental, finding answers to problems through direct observation, adequate experimentation and other argumentation of facts, verification and testing of knowledge are some of the initial manifestation of scientific attitude.

NEED AND SIGNIFICANCE OF THE STUDY

Learning of Science provides a good amount of training in scientific methods and also helps learners to develop a scientific attitude in them. Since the development of scientific attitude helps inculcate problem-solving approach, the researcher in this research study attempts to focus on the scientific attitude of the High school students and its relationship with Academic achievement.

OBJECTIVE OF THE STUDY

- To find out the significant relationship between scientific attitude and academic achievement of higher secondary school students.

HYPOTHESIS

1. There is no significant relationship between scientific attitude and academic achievement of higher secondary school students.

METHOD

In the present study, normative survey method was used. This method describes and interprets, what exists at present. They are concerned with existing conditions of relationship, prevailing practices, believes, attitude etc. process and the emerging trends.

SAMPLE

The random sample constitutes a total of 300 students from 7 different schools from XI standard in Krishnagiri district of Tamil Nadu State.

TOOL

- Scientific Attitude Inventory by Billech and Zakhariadas (1975).

Data Analysis

Table 1: Means and SDs for the Scores on Scientific Attitude & its Dimensions and Academic Achievement for the Entire Sample

Variable	Mean	SD	Percentage
Rationality	22.16	3.002	73.86
Curiosity	17.36	2.645	57.86
Open Mindedness	19.81	4.244	66.03
Aversion to Superstitions	19.88	3.599	66.26
Objectivity of Intellectual Belief	19.92	4.004	66.4
<i>Overall Scientific Attitude</i>	<i>99.13</i>	<i>10.235</i>	<i>66.08</i>
<i>Academic Achievement</i>	<i>63.8</i>	<i>17.343</i>	<i>63.8</i>

From Table-1, the Mean and SD of Scientific Attitude for the entire sample was 99.13 and 10.235 respectively. The mean Score percentage was the highest (73.86%) for the Rationality and the same was the lowest (57.86%) for the Curiosity.

Table-1 also shows that the Mean and SD of Academic Achievement for the entire sample was 63.8 and 17.34 respectively.

Table 2: Relationship between Scientific Attitude and Academic Achievement of Higher Secondary School Students

Variables	r-value	Level of Significance	Remarks
Scientific Attitude Vs Academic Achievement	0.362	P>0.05	Moderate Positive Relationship

From Table-2, the r-value 0.362 is significant at 0.05 level. Thus, there is a moderate positive significant relationship between scientific attitude and academic achievement of higher secondary school students.

FINDING

- There is a significant relationship between scientific attitude and academic achievement of higher secondary

school students.

IMPLICATIONS OF THE STUDY

From the result, the relationship of scientific attitude and academic achievement reveals positive correlation. This finding will be of great importance to the academic and research community. Steps can be taken to develop scientific attitude in the minds of the young learners so as to bring about a positive study habit in them. The study will be useful for curriculum planners. Science learning provides training in scientific method and also helps to develop a scientific attitude of mind in the learner. The study will also be helpful to the teachers and educational administrators to improve the scientific attitude among students.

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