

## A Comparative Study of Environmental Awareness and Scientific Attitude of Under Graduate Students



### Education

KEYWORDS :

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### ABSTRACT

*The present study has been conducted to investigate the environmental awareness of under graduate students. Result of the unmindful exploitation of natural resources by human being. There is an urgent need to create environmental awareness among all human beings to conserve, protect and nurture our environmental resources. Consequently the study was conducted on a random sample of 600 under graduate students. The environmental awareness ability measure by P.K Jha and scientific attitude scale A. Grawal was used collect data. The finding of the study indicated that environmental awareness has positive with scientific attitude among students and Level of environmental awareness intern of components attitude significantly differ to each other. The present study has been conducted to investigate the environmental awareness of under graduate students. Result of the unmindful exploitation of natural resources by human being. There is an urgent need to create environmental awareness among all human beings to conserve, protect and nurture our environmental resources. Consequently the study was conducted on a random sample of 600 under graduate students. The environmental awareness ability measure by P.K Jha and scientific attitude scale A. Grawal was used collect data. The finding of the study indicated that environmental awareness has positive with scientific attitude among students and Level of environmental awareness intern of components attitude significantly differ to each other. The result clearly indicate that a strong relationship between the environmental awareness and scientific attitude. Female students have higher scientific attitude compared to male under graduate students. It shows the science students is higher than the Arts students it indicate that scientific attitude was found better science students.*

### INTRODUCTION:

Environment is a broad term. It includes not only physical or material aspect but psychological, social and cultural aspect as well. Thus, environment consists of material and non-material surroundings of human beings.

Nature provides a limited freedom to man for conducting his exploitation activities. Man is a part of nature and hence can not exert control over nature on the basis of his free-will. When he tries to break the natural laws of nature he is bound to face the serious consequences.

In the contemporary world, the healthy existence of human society is getting worse. This state of affair is due to the unimaginably great volume of environmental maladies or problems which are pushing our planet almost to the brink of mass scale disaster of living beings or species on this good habitable earth. The wild storms of criminality and the volume unsocial passions are dangerously corroding the vitality and integrity of the working people of the world. The harmony of heart has been damaged and the tribunal of conscience has been greatly demolished due to unequal environmental conditions in which the modern man lines can bring into existence unlimited ugly situations and conditions, which can devour much of the potentials of creative and healthy lives of the human society.

Environmental crisis or maladies are the foremost and the most persistently challenging problems which are ready to devour the glories of human existence and are ready to wipe out the human civilization from earth. The present century is witnessing such problems of environment crisis which are nothing but the creation of a greedy human society which wants to exploit nature beyond any reasonable limit. Dominantly operative environmental maladies today all always active in informing man to think seriously and choose a way between creative and progressive existence or be ready for annihilation.

Efforts are being made to educate and to solve environmental problems. Environmentalists have taken up an environmental protection aspects in a serious way. It has taken a very strong position after the United Nations Conference on Human Environment at Stockholm in 1972, which was a ma-

ajor event for those concerned with the quality of the world's environment. One of the recommendations of the conference resulted in the creation of United Nation Environmental Programme (UNEP) while other recommendations specially constituted of foundation of framework for cooperative efforts on international level which states that environmental awareness may be adopted by:

- Identifying, analyzing and understanding the needs and problems of personal life including healthy vocation etc.
- Social life at different levels, viz. family, caste, community, religion, Town or village life, state and country and
- National life including civics, economic etc.

### NEED AND SIGNIFICANCE OF THE STUDY:

Everyone wants to live in pollution free environment. Environmental problems are one of the emerging problems for all over the world. Development is natural process but it creates a lot of other difficulties related to environment. Environmental problems are one of the emerging problems for all over the world. Development is natural process but it creates a lot of other difficulties related to environment. We face problems everywhere because of globally accepted pollution. Population explosion is one of the basic causes of the entire problem. We can't check it instead of different programmes. Our need increased day by day more rapidly. The country Try has to develop in every field of life such as economical development science and agriculture. Urbanization increased day by day vary rapidly.

Education is an important tool for the development of individual society as well as nation. Colleges play very important role in developing social awareness towards environment in society. Environmental education is very important to all people. Educational institutions may organise different programmes for awareness from time to time. Different activities try to focus on the ground reality about pollution. We can make our future prosperous and happy by controlling the pollutants. We must use our natural resources properly and live a peaceful life. Different other agencies may organize programmes for awareness for giving environmental education. It is necessary to develop right attitude among people. Not only lecture on specific topic but it is the time to change the mentality of the youths.

According to a report 90% of the information gained by the student is the result of their contact with the outside world. Modern communication technologies like T.V. Radio and Computer are the most effective medium for giving environmental education. Different programmes can be developed for students and it must be presented on T.V. and computers, Dramas in colleges and in urban rural areas are most effective method for giving more proper information and knowledge about the environmental problems. Debates are organized in colleges for preservation and conservation of our natural resources like soil, water rivers and oceans. NSS, NCC and Scouts/Guides campus are also organized to make aware the students about the emerging environmental problem and how to solve these problems.

**STATEMENT OF THE PROBLEM:**  
**“A Comparative Study of Environmental Awareness and Scientific Attitude of Under Graduate Students.”**

**REVIEW OF LITERATURE:**

The environmental education conference at Tbilisi (USSR) in 1977 identified its ultimate aim as “creating awareness, behavioral attitudes and values directed towards preserving the biosphere, improving the quality of life everywhere as well on safeguarding heritage. Including holy places, historical landmarks, works of arts, movements and sites, human and natural environment, Including fauna and flora and human settlements.

There is a folk song by Ghanshyam Shilani which starkly portrays the conditions of forests.

“Brothers and sisters! wake up forest has been clean shaved by the Government and the contractors, hug the trees, don’t allow them to be cut, don’t allow the wealth of the hills to be plundered.

National Environmental Awareness Campaign (NEAC) 2000-2001, started in 1986 for creating environmental awareness at all levels of the society, was continued during the year with main theme as ‘keep our Environment clean and Green.

According to Reynold and Welberg (1992) attitude towards science was shown to be predictive of academic performance in science.

**OBJECTIVES OF THE STUDY:**

1. To compare the scientific attitude of male and Female students under graduate students.
2. To find out the differences scientific Attitude of Arts and Science under graduate students.
3. To examine the relationship between environmental Awareness and scientific Attitude.

**POPULATION:**

Population for this study will be B.A., B.Sc., B.Com students of under graduate.

**SAMPLE:**

The Researcher will be selected a simple Random sample from the population. The random sample will be consisted of science art and commerce students of graduate level college of Lucknow city. The sample of the present study will be consisted of 500. Science, Art and Commerce students of graduate level.

**TOOL USED:**

**(EAAM) Environmental Awareness Ability Measure:**

In the present study “EAAM” by Dr. Praveen Kumar Jha. The present Tool Environmental Awareness Ability scale purports

to measure the extent and Degree of awareness of People about environmental pollution and its protection.

**Reliability:**

Three indices of reliability were deter secondly it was calculated by K.R. Method and was found 61 found-84 and thirdly, it was determined by test retest method. Two test retest reliabilities were deter and other of 6 months and the values were found -74 and 71 respectively.

**Validity:**

To determine validity of the Environment. Awareness ability measure coefficients of correlation between the scores of the present scale and environmental awareness scale of Tarniji was computed. The coefficient of correlation was found to be 0.83. The scale also possesses face and content validity science each item was Judged by experts.

➤ Science Attitude Scale (SAS): The SAS is dependable tool for measuring students attitude towards science. It appears to be useful for teacher of science, guidance workers and research scholars. The students of psychology and Education can also use it to study the development of their attitude towards attitudes.

**RELIABILITY OF SAS:**

The reliability of the Science Attitude scale (SAS) was estimated by the split half (0.86) and test retest (0.75) methods which was found to be quite satisfactory. This compares favourably with reliability (0.765) found by Sood (1975) for his scale of attitude towards science and scientists. Reliability of the scale was further and scientists. Reliability of the scale was further checked by two methods of scoring by administering the scale too small sample of 50 subjects with instructions to check the statements in accordance with the usual Thrustone’s in instructions and the science subjects were then asked to check for each item on one of the five alternative in accordance with the usual likert instructions. The coefficient of correlation found between the scores on two scales was 0.94.

**Validity:**

The SAS appears to have content validity and the method of selecting items supports his supposition. In addition, differences in mean scores was sound among the selected groups of knowns preference for science i.e. Arts (Mean 46.41) and science (Mean 50.58) students which is highly significant (6.62) at 1 percent level.

**STATISTIC USED IN STUDY:**

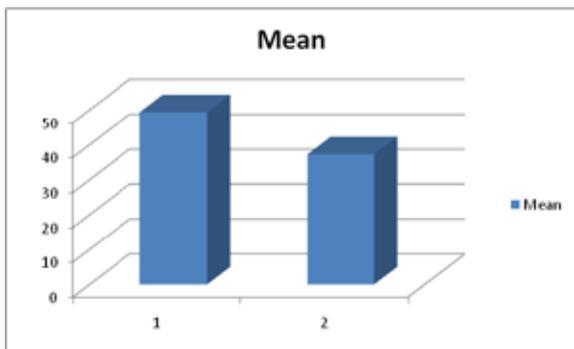
In Addition to general descriptive statistical analysis, other treatments such as t-test and correlation will used to achieve the objectives of the study.

**ANALYSIS AND DISCUSSION**

**Table-1 Relationship of environmental awareness and Attitude towards science.**

Variables	N	Mean	S.D.	Correlation Coefficient (r)
S.A.	300	49.33	9.902	0.527*
E.A.	300	37.22	6.919	

**0.01 level\***



**Graphical Presentation of Relationship of Environmental awareness and Scientific Attitude.**

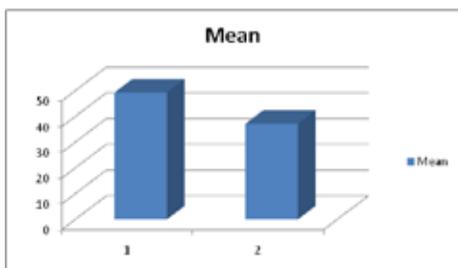
Table 1: The relationship between Environmental Awareness and Scientific Attitude. The Total sample were 600 (300 boys and 300 girls). The mean scores of Environmental awareness is 49.33 and 37.22 respectively where as the standard deviation (SD) of Environmental Awareness and towards science is 9.902 and 6.916 respectively. The estimated correlation coefficient( $r$ ) is 0.527. Which is significant at 0.01 level.

Hence the results clearly indicate that a strong relationship between the Environmental and towards science has been demonstrated by this finding.

**Table-2 Compare the Scientific Attitude of Male and female under graduate student.**

Scientific Attitude	Gender	Number	Mean	SD	' t value '	Significant
	Male	300	49.33	9.902	3.408*	significant
	Female	300	52.14	10.291		

0.01 level\*



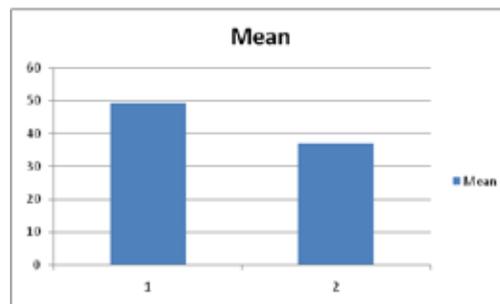
**Graphical Presentation of Scientific Attitude of Male and female under graduate student**

Table 2 Shows the mean of 300 female and 300 male under graduate students are 52.14 and 49.33 the SD is 10.292 and 9.902 the mean of female under graduate students (52.14) is higher than the mean of male under graduate which indicates that the scientific level was found better female than male.

**Table-3 Compare between Scientific Attitude of Arts and Science Under graduate students**

	Stream	N	Mean	SD	' t value '	Significant
SAS	Arts	200	51.25	9.723	2.775*	significant
	Science	200	52.05	10.886		

0.01 level\*



**Graphical Presentation of Scientific Attitude of Arts and Science Under graduate students**

Table-3. Shows that the Mean, SD of Scientific Attitude Score 200 Arts students are Mean 51.25 SD 9.723 and 200 Science students are Mean 52.05 SD 10.886 it shows the Mean of the Science Students is higher than mean of Arts students it indicate that the scientific attitude was found better science students.

**Finding:**

- The result clearly indicate that a strong relationship between the environmental awareness and scientific attitude.
- Female students have higher scientific attitude compared to male under graduate students.
- It shows the science students is higher than the Arts students it indicate that scientific attitude was found better science students.

**EDUCATIONAL IMPLICATIONS:**

On the basis of a single study, it will be add to suggest some educational implications of the present study.

- Educationist, educational administrators and teachers must acquaint their pupil about pros and cons of environmental pollution.
- Value- originated education in the light of environmental pollution and environmental awareness should be provided.
- Formal system of education should also incorporate in its curriculum. Some elements of environmental awareness programmes.

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