

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

Abstract

Environmental education, or Environmental studies or Environmental Science, all are collectively same, as a systematic study about our environment. Environmental education has been introduced as a compulsory subject in the curriculum of undergraduate level students of all streams like, art, science and commerce etc. The main objective of environmental education is to provide a wide exposure to students' different serious aspects of the environment. The present study aimed to assessing the awareness and responsibilities about environment, among our educated communities. It is important to know our environment and its scientific aspects closely. The present study has been done by survey method on male and female undergraduate level students. The present study also promotes the scientific attitude of undergraduate students which are not from science background, like art and commerce.

Keywords: Environment, Environmental Awareness, Scientific Attitude, Gender, Undergraduate.

Introduction

Education is universally accepted as a systematic and applied subject. Education is called systematic because it has a well defined pattern of study. Since a long time Education is universally recognized as the most effective tool of bringing out changes towards the social and economic betterment cultural transformation of a society and a nation as a whole.

Environment

The term environment is quite wide in nature. It includes not only physical or material aspects but psychological, social and cultural aspects as well. Thus, environment consists of material and non material surroundings of human beings. Environment is a dynamic phenomenon. It is dynamic and changes occur even if there is no human interference. The environment of any area is in state of dynamic equilibrium. This is what, is called the balance of nature. This balance or equilibrium of nature will get disturbed if the human being try to exploit the nature for their personal greed and lust for enjoyment.

Environmental Awareness

It refers to the awareness about physical, biological, social and cultural aspects of environment. Environment Awareness may be defined as to help the social group and individuals to gain variety of experiences and acquire a basic understanding of environmental and its associated problems. This awareness can be disseminated among young children through formal system of education by introducing various programs and including the content of environment in their curriculum. Environmental Awareness has now become a worldwide slogan and a serious concern is felt in the whole world regarding degradation of environment and that's why, environmental problems are being discussed at different international forums.

The awareness about environment can be achieved through the following measures:

1. Assessing, identifying and classifying the actual issues relating to personal life.
2. By changing the social structure at all levels such as family, society, community and religion
3. By implementing environment education in schools and colleges.

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Scientific Attitude

Scientific attitude refers a state of mind and a way of life. It is difficult to make a distinction between attitude and other effective attributes of personality like interest, appreciations, likes, dislikes, opinions, values, ideas and character traits. A person having scientific attitude is never superstitious. His mind is like a sea with open mouth, ready to gulp down new facts and has power or concrete and accurate observation and interpretation. There is no short cut or hard method to develop or change attitude of an individual.

Scientific attitude is an opinion taken with respect to a psychological object in the field of science. In the scientific attitude the purpose of this measure would be to find out whether or not the students have developed favorable attitudes towards science as a discipline. This has to be measured on the basis of the underlying assumptions being that one of the outcomes of science education is the development of positive attitude towards the science.

Statement of the problem:

A comparative study of environmental awareness and scientific attitude of male and female undergraduate students.

Table No. 1-

S. No.	Institutions Name	Total	Male	Female
1	Shri Jay Narayan P.G. college ,Lucknow	60	40	20
2	Bappa Shri Narayan Vocational P.G. College, Lucknow	60	30	30
3	Mumtaz Degree College ,Lucknow	60	40	20
4	Kali Charan degree college, Lucknow	40	20	20
5	National P.G. College, Lucknow	40	20	20
6	Eram Girls Degree College, Lucknow	40		40
7	G.S.R.M. Degree College, Lucknow	60	30	30
8	Kuwar Ashif Miya Degree College, Lucknow	60	40	20
9	G.C.R.G. Group of Institutions, Lucknow	30	15	15
10	Lala Mahadev Prasad Verma Balika Mahavidyalaya	40		40
11	Mahesh Prasad Degree College, Lucknow	60	40	20
12	Charak Degree College, Lucknow	50	25	25

Research Tools

The investigator had used two standardized research tools for the study.

1. EAAM-[Environmental Awareness Ability Measure]-Dr. Praveen Kumar Jha (Madhaupur, Bihar)
2. SAS-[Science Attitude Scale]- Dr. Avinash Grewal (Bhopal)

Statistical Techniques Used

Following statistical measures were used for analyzing the data-

Objectives of study

The present research is on the topic is being conducted within the following objectives;

1. To compare the environmental awareness of male and female under graduate students.
2. To compare the scientific attitude of male and female under graduate students.

Hypothesis

The null hypothesis of the study includes the followings-

1. There is no significant difference between environmental awareness of male and female under graduate students.
2. There is no significant difference between scientific attitude of male and female under graduate students.

Research Methodology of The Study

The research methodology of present study is Descriptive Survey method.

Sample of The Study

In the present study, the investigator selected 12 institutions for random sampling in Lucknow district. He selected 600 under graduate students, 300 male and 300 female students, as sample.

1. Mean
2. Standard Deviation (S.D.)
3. t-test

Analysis and Interpretation of Data:

1. There is no significant difference between environmental awareness of male and female under graduate students.
 - 1.1. Gender wise comparison of the environmental awareness of under graduate students.

Table No.2

Gender EA.	N	Mean	S.D.	SEM	t-test	Significant
Male	300	36.81	6.058	0.492	0.156	Significant at 0.05 level
Female	300	36.73	6.014			

1. That the table no. 2 shows that the mean scores of environment awareness of male and female under graduate students are 36.81 and 36.73 respectively.
2. The standard deviations (SD) on the scores of male and female UG students are 6.058 and 6.014 respectively.
3. The calculated t-test value is 0.156 which is lower than tabulated t-value i.e. 1.98 at the level of 0.05 significant.
4. With the use of t-test we found that the first null hypothesis related to environmental awareness on comparison of gender, is accepted, on level of 0.05 significant. This shows that the environmental awareness of under graduate students not differs on gender basis.

2. There is no significant difference between scientific attitude of male and female under graduate students.

- 2.1. Gender wise comparison of the Scientific Attitude of under graduate students.

Table No.3

Gender EA.	N	Mean	S.D.	SEM	t-test	Significant
Male	300	49.08	10.30	0.906	3.064	Significant at 0.05 level
Female	300	51.86	11.86			

1. That the table no.3 shows that the mean scores of scientific attitude of male and female under graduate students are 49.08 and 51.86 respectively.
2. The standard deviations (SD) on the scores of male and female UG students are 10.30 and 11.86 respectively.
3. The calculated t-test value is 3.064 which is Higher than tabulated t-value i.e. 1.98 at the level of 0.05 significant.
4. With the use of t-test we found that the second null hypothesis related to scientific attitude on comparison of gender, is rejected, on level of 0.05 significant. This shows that the scientific attitude of under graduate students differs on gender basis.

Conclusion

The findings, as the results of investigator, are listed as following-

1. It means that there is no significant difference between environmental awareness of male and female UG students. It was also found that the environmental awareness of male and female students are near about equal. It means that male and female students are both interested to know and understand the environment.
2. It means that there is significant difference between scientific attitude of male and female UG students. It was also found that the scientific attitude of female students is higher than the male students. It means that female students are more interested to know and understand the scientific aspects.

Education Implication of the Study

1. Educationists, educational administrators, and teachers must acquaint their pupil about pros and cons of environmental pollutions.

2. It would be more beneficial and effective if special programs are launch to develop environmental awareness among the students. This is possible only through inclusion of special courses on environment education in school curriculum.
3. Value oriented education in the light of environmental pollution and environment awareness should be provided.
4. The government should provide books related to science and environment for students.

Bibliography

- Anandarasu, R. (2016)" B.Ed Students attitude towards environmental education. *EDU Tracks Educational Journal*, vol.15-No. 11, PP14-18
- D.Malathi, K. (2002). *Gender difference in environmental awareness.*
- Grewal, A. (2005) *science attitude scale (SAS)*, National Psychological Corporation, Agra.
- Jha, P. (2009) *Environmental Awareness Ability Measure.* National psychological corporation, Agra.
- Sandhya (2007), *A study of environment awareness and scientific attitude of secondary level students.* M.Ed dissertation, bundelkhand University, Jhansi.
- Sharma, S.R. (2006), *Methods of Educational Research*, Anmol Publication.
- Singh, A. (2004), *A study of learning study of secondary school students with scientific attitude and their achievements in science*, Ph.D Education, Lucknow University.
- Shukla, Vinay. (2009), *Environmental Awareness and attitude of teacher, of secondary schools*, M.Ed. dissertation, C.S.J.M. University, Kanpur.