Environmental Awareness Among Higher Education Students

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ABSTRACT:
Environmental awareness is the impression of being knowledgeable about the environment. It states the set of principles, opinions, and morals that assist us in contributing to the well-being of the natural environment thus analysing and understanding the problems associated with it. In the existing scenario, knowing, identifying, and familiarizing ourselves with our environmental surroundings has made us aware of the crucial danger that it is in. The conservation, protection, and preservation of the natural environment have become of the highest importance because of the constant neglect that the students have shown towards it. Environmental education plays a significant role in the development of environmental awareness. So, the researcher wanted to conduct this research. The objective of the present study was to find out about Environmental Awareness among Higher Education Students. This study is done by using the Descriptive Survey Method and the Researcher has analysed data in a qualitative approach. A total of 100 samples have been taken from UG and PG students of various departments of the University of Kalyani. The Researcher framed one questionnaire consisting of 30 questions with 4 options. After the data analysis, the Researcher found that - PG students are more aware than UG students, Male students are more aware than Female students, Rural and Urban students are equally aware of Environmental Awareness, Reserve and Unreserve category students are equally aware of Environment Awareness, and Science students are more aware of Environment Awareness than Arts students.

Keywords: Environment, Environmental Awareness, Environmental Education, Higher Education Students,

INTRODUCTION: The environment has influenced and shaped our lives since time ancient. It is from the environment that We get our food to eat, water to drink, air to breathe, and all the necessities of day-to-day life, thus establishing a life support system. Through the process of natural selection and exclusion, the environment has caused the evolution of the biological variety, the biosphere as it exists today. Today environment has become the concern of all academicians, intellectuals, scientists, policymakers, and governments across the continents (Kant and Sharma, 2013). In the past few years, it has been observed that there were too many negative consequences on the environment due to various natural causes and human activities. It had impacts on the natural world and biodiversity and led to the deprivation of quality of essential elements like air, water, and soil. There has been a significant indication of human activities that have contributed majorly to this hazard.

In the present time, environmental awareness should be developed among the common people, particularly among youths. For environmental awareness, the whole society must work at a grassroots
level for the conservation of the environment. To generate environmental values among youth, it is important to know the responsibility towards the environment and behave like an eco-friendly. Environmental awareness is an integral part of any environmental curriculum encouraging the masses particularly the youth to participate in the protection of the environment. The ever-increasing population and changing lifestyles of the people will contribute extremely towards growing environmental issues at global, regional, and local levels. Today, people are not aware of their role in the appearance of environmental problems and how they will critically impact our environment. This implies that environmental awareness is essential among the college youth so that they should stop using environmental resources extensively; protect our environment and help in creating sustainable development.

Environmental Education was defined as the learning process that builds the people's knowledge and awareness regarding the environment and associated problems and develops the necessary skills, expertise, and attitude, motivations, to make informed decisions and take responsible actions” (UNESCO, 1978). In India, despite the long tradition of an environment-friendly society, environmental issues have received serious attention in the global context. At present environment is a highly concerned area in terms of environmental pollution, global warming, acid rain, solid waste, loss of biodiversity, etc., and has been increasing gradually. Environmental Education in India was generally given in environmental science in primary school, social sciences, and biological Science in secondary school. The science and technology lessons cover environmental education-related issues, so, it becomes essential to build awareness regarding environmental problems for every student. only a few members of researcher from various regions are interested, in focusing the environmental awareness at the primary and secondary school level, although it has been implemented but not successful at the university level, so, the present study focused on environmental awareness in higher education students in the Nadia district.

REVIEW OF RELATED LITERATURE: The Researcher has reviewed both Indian and Abroad studies for this research. Those are:

Anbalagan G. & Viswanathan, S. (2015) studied “A study on environmental awareness and related practices Among the high school students in Madurai district, Tamil Nadu.” Study The study was to assess the Environmental Awareness potential of the students based on different environmental problems & and to suggest proactive roles of National Green Corps, Eco clubs, Green clubs, and other similar innovative measures in schools in building environmental awareness and sustainable action in society to solve environmental problems. The study is primarily based on the field-level survey from the students in the predefined questionnaire on different environmental issues. The field study was based on a random selection of data for the survey. In this study, standard statistical techniques such as Mean (X), Standard Deviation, and t-test were used in the analysis of the data. The girl’s students’ contribution to awareness of knowledge on environmental issues is higher compared to boys’ students. the research sensitizes that the environmental awareness and practices on day to day life of young students make their social responsibility in greening nature and conservation of biodiversity.

Chaudhari, D. (2015) studied “Awareness Towards Environment among Secondary School Students.” The objective of the study is to find out awareness about environmental pollution & environmental changes among Secondary School children. 750 sample of the study has been selected by the stratified random method which includes 5 Schools of each of the 3 Talukas. A Questionnaire was used as the tool for the study which consisted of 4 sections namely knowledge about the environment, knowledge about
environmental pollution knowledge about environmental changes, the data obtained through the questionnaire were statistically analysed, and mean scores were obtained. Frequency distribution was prepared on responses obtained on the question which were converted into percentages and the opinions of the students were demonstrated. The result of the study was Most of the students were found to be familiar with the issue of environment, human existence, and its factors. Most of the students were found to be familiar with the factors with pollute the environment and more students were found aware of the remedies to prevent environmental pollution.

Danielraja, R. (2019) conducted “A Study of Environmental Awareness of Students at Higher Secondary Levels.” The study aims to extend the awareness of students to environmental education and social issues related to environmental pollution. The study was carried out with a sample of 180 students from Standard XII using an environmental awareness scale to assess the significant difference in the mean scores of environmental awareness. The results indicated that there was a significant difference in the mean scores of Environmental awareness between the students belonging to the science group and arts group, there existed a significant difference in the mean scores of Environmental awareness between the students belonging to the science group and vocational group.

Gummadi, S., Latha, S., & Rao, P. B. (2020) studied “A Study on Level of Environmental Awareness Among Secondary School Students in Guntur District, Andhra Pradesh.” This study examined the environmental awareness in secondary school students, via a random sampling method; 240 students were selected from six different schools in Guntur district, Andhra Pradesh. The normative survey method is used to study the level of awareness in students. The Scale was constructed and validated by the investigator and calculated the mean, standard deviations, and test of significance. The results indicated that there is no significant level of environmental awareness among the students and it differed with gender and location of students.

Narwal, K. (2021) studied “Development of Environmental Awareness Among Youth: A Review” The Objective of the study was to study environmental awareness among youth. This paper is descriptive. Secondary data has been used in this study. Data was collected from books, websites, and journals. The results revealed that most students of colleges and schools are environmentally aware but the awareness level of the students of graduation and post-graduation is high as compared to the awareness level of the students of schools. Science and commerce students have more awareness regarding the environment in comparison to the students of the Arts stream and no significant difference has been found between males and females regarding environmental awareness.

Sahidullah, A. (2020) studied “A Study of Environmental Awareness Among Secondary School Students.” The present study is an attempt to study the environmental awareness of secondary school students concerning gender. A descriptive research method has been used in the present study. 100 students of class X were selected as a sample of the study. In the present study, the researcher has used a random sampling technique. The tool used in the study was the Environment Awareness Ability Measure (EAAM) prepared by Dr. Praveen Kumar Jha. The data were analysed using descriptive statistics such as mean and standard deviation and inferential statistics like t-tests. The results revealed that the level of Environmental Awareness of secondary school students was above average. Further, no significant difference was found in the environmental awareness of secondary school students concerning gender.

Sivamoorthy, M. Nalini, R. Satheesh Kumar, C. (2013) studied “Environmental Awareness and Practices among College Students.” This study aims to measure the environmental awareness level and practice among college students. And to suggest actions towards creating environmental awareness and
environment-friendly practices among college students. The descriptive design suits this paper and fulfils the above-mentioned aim and objectives. The primary and secondary data have been collected. the researcher adopted a Standardized scale on Environmental Awareness Ability Measure (EAAMJPK English to Tamil) and a self-prepared questionnaire on environmental practices was used for collecting primary data. In this research, a multi-stage sampling method was followed to select the study area respondents. It reveals that the level of awareness is high among the respondents irrespective of gender difference but at the practice level, there is a difference between genders i.e. males’ practice more than females. This study also proposes some recommendations to safeguard the environment in India.

Astalin, P. K. (2011) studied “A study of environmental awareness among higher secondary students and some educational factors affecting it.” In this study, the investigator has tried to find the environmental awareness among higher secondary students and some educational factors affecting it. A total of 608 students were selected from different boards using a cluster random sampling technique with 280 male and 328 female students. For collecting data, the tool “Paryavaran Jagrukata Prashnavali” constructed by the investigator was used. Post Hoc Tests, F-tests, and t-ratio tests were used to analyse data. Science stream students had more environmental awareness in comparison to arts stream students. The CBSE students had more environmental awareness in comparison to UP Board students. Finally, the male students also had more environmental awareness than female students.

Subashini, H. (2014) studied “A Study of Environmental Awareness of the Students at Higher Secondary Level.” To study the extent of awareness of students to environmental education & and social issues related to environmental pollution. To throw light on salient features of environmental education. This research is a type of quantitative research with a descriptive research approach. sample for the final study consists of 180 Students. The investigator employed the tool “Environmental awareness questionnaire” for this study. The findings of the study were that There exists a significant difference in the mean scores in Environmental awareness between the students belonging to the science group and arts group & vocational group. There exists no significant difference in the mean scores in Environmental awareness between the students belonging to the vocational group and arts group & and also the students in terms of gender.

Verma, A. & Verma, V. (2022) studied “Environmental Awareness among Students.” The paper aims to measure the level of environmental awareness and habitual practices towards the environment among undergraduate regular students with special reference to Arts and Science colleges in Dindigul district, Tamil Nadu. The descriptive design suits this paper and fulfils the above-mentioned aim and objectives. the researcher adopted a Standardized scale on the Environmental Awareness Ability Measure (EAAMJPK English to Tamil) and self-prepared questionnaires on environmental practices were used for collecting primary data. In this research, a multi-stage sampling method was followed to select the study area respondents. Girls have better practices in the environment than boys. There is no difference between Gender and environmental practice. There is no significant relationship between environmental awareness and environmental practice. The researcher recommends that environmental studies should be included.

**OBJECTIVES:** The researcher has selected the following objectives-
- To measure the Environmental Awareness among UG & PG students.
- To find out the differences between Boys and Girls towards Environmental Awareness.
- To find out the difference between Rural and Urban students towards Environmental Awareness.
• To find out the difference between Reserved and Unreserved category students towards Environmental Awareness.
• To find out the difference between Science and Art students towards Environmental Awareness.

HYPOTHESES: Researchers have selected the following hypotheses:

- **H₀₁**: There is no significant differences between PG and UG students towards Environmental Awareness.
- **H₀₂**: There is no significant differences between Female and Male students towards Environmental Awareness.
- **H₀₃**: There is no significant differences between Rural and Urban students towards Environmental Awareness.
- **H₀₄**: There is no significant differences between Unreserved and reserved category students towards Environmental Awareness.
- **H₀₅**: There is no significant differences between Science and Art students towards Environmental Awareness.

METHODOLOGY: The researcher followed the Descriptive Survey Method for conducting the study. The important constructions of the study were:

- **Variable**: The researcher considered one variable – Environmental Awareness.
- **Sample**: The researcher selected 100 students (UG & PG) from two departments at the University of Kalyani. Here, the researcher used purposive sampling for data collection.
- **Tools**: The researcher has constructed one questionnaire consisting of 30 items for this study with 4 options. Questionnaires were validated by the experts.

DATA ANALYSIS:
Researchers have analysed data according to the research Hypotheses. At first, the researcher analysed data and then presented it in a Bar Graph with explanations.

**H₀₁**: There are no significant differences between PG and UG students towards Environmental Awareness.

<table>
<thead>
<tr>
<th>Groups</th>
<th>Number</th>
<th>Mean</th>
<th>SD</th>
<th>df</th>
<th>T Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>PG Students</td>
<td>50</td>
<td>21.26</td>
<td>2.53</td>
<td>98</td>
<td>4.96</td>
</tr>
<tr>
<td>UG Students</td>
<td>50</td>
<td>18.04</td>
<td>3.83</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Significant at 0.01 Level**

![Fig-1: Mean Differences of UG and PG students](image-url)
In the above table, the calculated value was found to be significant, therefore, the corresponding null hypothesis ($H_0$) was rejected. As such, it could be inferred that there is a significant difference in the mean scores of PG and UG students towards Environmental Awareness. The researcher concluded that PG students are more aware of Environmental Awareness than UG students.

**Ho2**: There are no significant differences between Female and Male students towards Environmental Awareness.

<table>
<thead>
<tr>
<th>Groups</th>
<th>Number</th>
<th>Mean</th>
<th>SD</th>
<th>df</th>
<th>T Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>76</td>
<td>19.19</td>
<td>3.54</td>
<td>98</td>
<td>2.28</td>
</tr>
<tr>
<td>Male</td>
<td>24</td>
<td>21.08</td>
<td>3.54</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Significant at 0.05 level

![Fig 2: Mean Differences of Female and Male students](image)

In the above table, the calculated value was found to be significant, therefore, the corresponding null hypothesis ($H_0$) was rejected. As such, it could be inferred that there is a significant difference in the mean scores of total Female and Male students towards Environmental Awareness. Researcher concluded that Male students are more aware of Environmental Awareness than Female students.

**Ho3**: There are no significant differences between Rural and Urban students towards Environmental Awareness.

<table>
<thead>
<tr>
<th>Groups</th>
<th>Number</th>
<th>Mean</th>
<th>SD</th>
<th>df</th>
<th>T Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural Students</td>
<td>65</td>
<td>19.38</td>
<td>3.91</td>
<td>98</td>
<td>1.00</td>
</tr>
<tr>
<td>Urban Students</td>
<td>35</td>
<td>20.14</td>
<td>2.98</td>
<td></td>
<td>Not Significant</td>
</tr>
</tbody>
</table>

Table – 2
Fig-3: Mean Differences of Rural and Urban Students

In the above table, the calculated t-value was found to be not significant, therefore, the corresponding null hypothesis (H₀) was accepted. As such, it could be inferred that there is no significant difference in the mean scores of Rural and Urban students toward Environmental Awareness. The researcher concluded that both Rural and Urban students are equally aware of Environmental Awareness.

H₀₄: There are no significant differences between Unreserved and reserved category students towards Environmental Awareness.

Table-04

<table>
<thead>
<tr>
<th>Groups</th>
<th>Number</th>
<th>Mean</th>
<th>SD</th>
<th>df</th>
<th>T Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unreserved</td>
<td>62</td>
<td>19.77</td>
<td>3.85</td>
<td>98</td>
<td>0.45</td>
</tr>
<tr>
<td>Reserved</td>
<td>38</td>
<td>19.43</td>
<td>3.21</td>
<td></td>
<td>Not Significant</td>
</tr>
</tbody>
</table>

Fig-4: Mean Differences of Reserved and Unreserved Category Students

In the above table, the calculated t-value was found to be not significant, therefore, the corresponding null hypothesis (H₀) was accepted. As such, it could be inferred that there is no significant difference in the mean scores of Reserved and Unreserved students toward Environmental Awareness. The researcher concluded that both Reserved and Unreserved students are equally aware of Environmental Awareness.

H₀₅: There are no significant differences between Science and Art students toward Environmental Awareness.

Table- 05

<table>
<thead>
<tr>
<th>Groups</th>
<th>Number</th>
<th>Mean</th>
<th>SD</th>
<th>df</th>
<th>T Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Science</td>
<td>50</td>
<td>21.26</td>
<td>2.53</td>
<td>98</td>
<td>4.96</td>
</tr>
<tr>
<td>Arts</td>
<td>50</td>
<td>18.04</td>
<td>3.83</td>
<td></td>
<td>**Significant at 0.01 level</td>
</tr>
</tbody>
</table>
Fig-5: Mean Differences of Science and Arts Students

In the above table, the calculated t-value was found to be significant, therefore, the corresponding null hypothesis ($H_0$) was rejected. As such, it could be inferred that there is a significant difference in the mean scores of Science and Arts students toward Environmental Awareness. The researcher concluded that Science students are more aware of Environmental Awareness than Arts students.

DISCUSSION:
Basis of this analysis, the Researcher concluded that PG students are more aware than UG students, Male students are more aware than Female students, Science students are more aware than Arts students. Based on reviews, the researcher found that previous researchers' works concluded the same results. Male students are more aware than Females (Astalin, 2011, Sivamoorthy, Nalini, Satheesh, 2013, Kumar, & Lal, 2022) Science students are more aware than Arts students (Subashini, H. 2014, Danielraja, 2019, Sharma, 2021, Narwal, 2021), Urban students are more aware than Rural students (Sharma, 2021), PG students are more aware than School students (Narwal, 2021), Young students make their social responsibility in greening nature and conservation of biodiversity (Anbalagan & Viswanathan, 2015), environmental studies should be included in their curriculum (Verma, & Verma, 2022).

CONCLUSION:
Environmental awareness is crucial for a healthy environment and it plays an important role in creating a pollution-free environment. Several efforts are being taken to develop environmental awareness among the students. National Environment Awareness Campaign (NEAC) was launched by the Ministry of Environment and Forests (MOEF), Government of India. This campaign was initially organized in 1986, to create environmental awareness at the national level and since then it has become an annual activity. In this campaign, nominal financial assistance is provided to NGOs, schools, universities, research institutes, army units, etc. to increase awareness and action-oriented activities. Environmental Education develops proper attitudes, awareness, and behaviour about the environment among the students and guides them in the right direction. It also enables them to realize their responsibilities towards the environment so that they can contribute meaningfully towards conserving and protecting the environment. To further increase environmental awareness Ability of students to integrate environmental education into curriculum, teachers training and training trainers, campaigns with religious leaders and forums, working through community leaders, development and distribution of resource material, and conducting Extra-curricular activities. Let Us conserve, recycle, renew, reforest, replenish, contest, legislate, alleviate, minimize,
reprimand, pressurize, and prosecute all that is needed to revive and refresh our environment for a better future for our coming generations.

REFERENCES:


