

Descriptive Article

ENVIRONMENTAL AWARENESS

Ms. Steny Thomas ¹Dr. K. Mangai ²

¹M.Ed Research Scholar, Stella Matutina College of Education, Chennai, TN, India.

² Assistant Professor, Stella Matutina College of Education, Chennai, TN, India.

ORCID <https://orcid.org/0009-0007-6404-5864>

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Abstract

Environmental awareness is an incredibly important part of our lives. In order to protect the sustainability of the planet, everyone needs to commit to becoming more environmentally aware. The emphasis should be on the teaching people how to think, rather than what to think. Environmental awareness not only implies knowledge about environment but also the attitude, values and necessary skills to solve environmental related problems. People need to learn ways to perceive environmental problems. It is very essential for each individual to develop an awareness of protection and prevention towards the environment. It is imperative that humans implement new ways of thinking and change their current ways of living due to irresistible effects of environmental degradation. It is only the knowledge and understanding that can do this. College students not only study this for themselves but can spread the knowledge and understanding to others in their family, neighborhood etc, which can help to restore degraded environment. So, it was decided to construct an environmental awareness scale for college students. This questionnaire was aimed at uncovering the knowledge and conceptions of college students about the environment and other issues relating to environment. This tool will help to find out environmental literacy and the environmental awareness index of the college students.

Keywords: Environmental Awareness, Sustainability, Conservation, Pollution

Introduction

Environmental awareness means being aware of the natural environment and making choices that benefit the Earth, rather than hurt it. Being environmentally aware mean understanding how our behavior impacts the environment and committing to make changes to

our activities to protect the planet. Some of the ways to practice environmental awareness includes: Using safe and nontoxic building supplies, conserving energy and water, recycling, activism and others. The environmental concern is growing today at greater speed in developing, developed and under developed countries because the consequences of the environmental damages has become apparent and horrifying. While there is a consensus about severity of the environmental degradation taking place worldwide, there is little consensus about what can, and should be done to avert future environment catastrophe. Educating public and creating public awareness is a necessity of success of environment. Population explosion, Urbanization, clear-cutting of forests, depletion of ozone layer, erosion of soil, pollution of water resources, accelerated rate of the extinction of species, destruction of varieties of ecosystems and global warming are few examples of environmental degradation. Beside destructive trend on environment, sluggish improvement on environmental awareness and the initiatives revealed bitter consequences of environment. Knowledge by environmental education was started globally as an effort to protect environment and sustainable development when it was observed to have potential to manage life and to establish a prosperous and peaceful future.

Statement of Problem

Environmental awareness is necessary to know the importance of keeping the environment clean and also protecting the Earth. So, the survey focus on the topic entitled “Measuring Environmental Awareness level for a sample of college student”.

Objectives of the Study

- The study aims to measure the level of the environmental awareness for a random sample of college students from various specializations.
- In addition, the study focuses on identifying the need and steps to increase and disseminate the environmental awareness.

Tool Description

- The environmental awareness scale consists of 25 items that are in statement form followed by given alternative responses to each item.

- This scale is a 5 points Likert scale. These items seek responses in “Extremely Aware”, “Moderately Aware”, “Somewhat Aware”, “and Slightly Aware” and “Not at all Aware” with scores rewarded as 5, 4, 3, 2 and 1.
- The student has to select one response against each statement.

Administration of Survey

- The Environmental Awareness questionnaire was created and sent using “Google Forms” to different colleges.
- Generally 10 minutes have been found sufficient to deliver the questionnaire.
- The necessary instructions to fill the form were given in the “Google Forms”.

Report of the Environmental Awareness Survey for College Students

- The Environmental Survey Questionnaire prepared by the investigator was sent to different college students in Chennai.
- The Questionnaire was sent online using “Google Forms” and a total of 221 responses were received personal variables like Gender; Stream of study; Medium of Instruction; Region; Family Type; Type of College and Socio-Economic status of the students was collected.

Following Are the Percentage of Responses Based On the Personal Variables;

- **Gender:** Out of the 221 survey participants 82.8% were female and 17.2% were male.
- **Stream of Study:** The students from the streams Education 57.9%; Science 23.1% and Arts 10.9% participated in this survey.
- **Medium of Instruction:** 65.2% English medium students and 34.8% Tamil medium students participated in this survey.
- **Region:** 55.7% Survey participants were from urban region and 44.3% from rural region.
- **Family type:** Most of the participants about 66.5% were from nuclear family.
- **Type of college:** Students from private colleges 54.8% and Government aided colleges 39.8% participated in this survey.
- **Socio-Economic Status:** Most of the participants belong to Middle Socio-Economic strata.

Following Are the Percentage of Response Based on the Environmental Awareness Questions

- **Q1:** We are approaching the limit of number of people the Earth can support.
 - ✚ From the response to the statement, it is known that most of the participants, i.e., about 43.9% were extremely aware or at least 25.8%, 15.4% were aware that the Earth is reaching its maximum capacity.

- **Q2:** When humans interfere with nature it often produces disastrous consequences
 - ✚ Almost half the populations 47.3% were aware of the disastrous consequences of human interference with nature.

- **Q3:** Humans are severely abusing the environment.
 - ✚ Nearly 3/4th 66.2% were aware that humans are severely abusing the environment.

- **Q4:** If things continue on their present course, we will soon experience a major ecological catastrophe.
 - ✚ All the participants are aware of the facts that if things continue in the same pace, ruination of nature is unavoidable.

- **Q5:** Most storm water drains and road gutters drain directly into stream, river or sea.
 - ✚ All the participants are aware of the above fact.

- **Q6:** The effects of pollution on public health are worse than we realize.
 - ✚ The participants are aware of the ill effects of pollution on people's health.

- **Q7:** Tropical rain forests are essential for maintaining healthy planet.
 - ✚ Nearly half of the sample population are aware of the above statement and the rest of the population are at least little aware of the same.

- **Q8:** Plastic is non-biodegradable.
 - ✚ Large percentage of the sample population 68.3% is extremely aware of the above statement.

- **Q9:** The invasive species like eucalyptus pose threat to the biodiversity of an area and human welfare.
 - ✚ The awareness regarding the invasive species seems to be less among the sample population. Out of which 14.5% are not at all aware about the destruction caused by the invasive species.

- **Q10:** Hazardous e-waste is produced more and more because humans don't recycle enough or reuse their electronic gadgets in a proper manner.
 - ✚ Nearly 3/4th of the sample populations were aware that we do not follow the 3R principle in case of electronic gadgets.

- **Q11:** Oil spills frequently kills the marine mammals such as whales, dolphins etc.
 - ✚ Nearly 80% of the sample population had a good awareness about oil spills and its ill effects.

- **Q12:** Sea level has risen because of global warming.
 - ✚ Nearly 90% of the sample populations are very well aware about the sea level rising due to global warming.

- **Q13:** The main cause of increasing air pollution is exhaust from vehicle overuse.
 - ✚ Nearly 63.3% of the sample populations were extremely aware about the consequence from vehicle overuse.

- **Q14:** CFCs emitted from AC and refrigerators is causing ozone depletion.
 - ✚ Nearly 85% of the sample populations had good awareness about ozone depletion and its causes.

- **Q15:** Crop rotation helps return nutrients to soil without synthetic inputs.
 - ✚ There was good awareness about crop rotation practices and its uses.

- **Q16:** Mining processes cause erosion, loss of biodiversity and contamination of soil, ground water and surface water.

- About 89% of the sample populations had awareness about mining process and its effect on soil. Out of these 89%, 39.8% of sample populations were extremely aware of the same.
- **Q17:** Eutrophication occurs due to nitrogen pollutants runoff agricultural lands.
 - 9% of the sample populations were not at all aware of what Eutrophication is and 33% were extremely aware.
- **Q18:** Vermicomposting is a low cost, effective biological method for waste management in which microbes assist earth worms in waste degradation.
 - More than 85% of the sample populations were aware of the preparation of organic manure from waste whereas rest of the population was not aware of the same.
- **Q19:** Radioactive waste is a result of many activities including nuclear medicine, nuclear research, nuclear power generation, rare-earth mining and nuclear weapons reprocessing.
 - Nearly 16.7% of the sample populations were ignorant about the hazardous radioactive wastes, and the rest of the populations had less awareness of the same.
- **Q20:** Growing population and its demands disrupt the ecological balance.
 - 46.2% of the sample populations were extremely aware that the growing population will also lead to growing demands and will exert pressure on the ecology for their basic needs like food and shelter, which in turn will disrupt the ecological balance.
- **Q21:** The loss of trees and other vegetation can cause climate change, desertification, soil erosion, fewer crops, flooding, increased greenhouse gases in the atmosphere etc.
 - More than half of the populations 62% were extremely aware about the ill effects caused by deforestation.
- **Q22:** Planting trees improve air quality, reduce noise pollution and reduce the amount of storm water runoff.
 - Nearly 89% populations were aware of positive outcome of planting trees in the environment and only few were ignorant of this fact.

- **Q23:** The usage of cleaner and efficient renewable energy sources like solar panels build communities that are sustainable.
 - ✚ Nearly 85% of the populations had a good awareness that alternative energy resources can bring about the sustainable development.

- **Q24:** Fish, sea birds, sea turtles and marine mammals become entangled in or ingest plastic debris, causing suffocation, starvation and drowning.
 - ✚ Nearly 7.2% of the sample populations were not at all aware of how the human activities damage the ocean ecosystems.

- **Q25:** Coral reefs are dying due to damaging activities like coral mining, pollution, over fishing etc.
 - ✚ Nearly 10.4% were not at all aware about the conditions of our coral reefs.

Discussion

From the environmental survey, most students are extremely aware of the following

- ❖ Human activities are the major cause of the environmental degradation.
- ❖ Growing population disrupts balance i.e., ecological balance and affects its carrying capacity.
- ❖ If humans continue to abuse environment, we will soon experience major ecological catastrophe.
- ❖ Effects of human activities like usage of plastics, production of e-waste, oil spills, over use of vehicles/ AC/ Refrigerators, mining etc are pollution, global warming, loss of species, ozone depletion, natural disasters etc.
- ❖ This environment degradation causes health problems to humans, animals and plants.
- ❖ In order to reverse the effect of environmental degradation, humans need to follow sustainable consumption of resources.
- ❖ We need to follow healthy practices like the afforestation, follow 3R principle (Reduce, Recycle & Reuse) stop usage of single use plastic, preserve native species, crop rotation, Vermicomposting instead of the synthetic fertilizer, use of alternate cleaner energy resources and stop over-exploitation of all the natural resources.

From the survey result, it is known that few people are ignorant about the following;

- ✚ **Invasive Species** - It was noted that some participants are completely unaware of what an invasive species is. This can lead to extensive loss of the indigenous/ native species of a region and can negatively alter the environment.
- ✚ **Coral Reefs** - People seems to be very much ignorant about the coral reefs which protects the coastline from the natural calamities and also acts as a source for food and medicine.
- ✚ **Damage to Ocean Lives** – Few people were not at all aware how the plastic debris we throw into the ocean is killing marine life.

Implication

- ✓ Environmental awareness helps to see the interconnectedness of human, animals and environment.
- ✓ Environmental awareness encourages us to research, investigate how and why things happen, and make their own decisions about complex environmental issue.
- ✓ By developing and enhancing critical and creative thinking skills, environmental awareness helps foster a new generation of informed consumers, workers, as well as policy or decision makers.
- ✓ Environmental awareness makes people to take responsible action for the betterment of environment.
- ✓ It encourages eco-friendly practices and use of alternative, clean resources and encourages healthier lifestyle.
- ✓ It strengthens the community and reduces the nature deficit disorders.
- ✓ Environmental awareness helps us to attain the sustainable development goals.

Suggestions/Recommendations

Even though the environmental awareness level is fairly good among college students, there is not much enthusiasm in implementing the necessary steps to improve the environment conditions. The awareness alone does not bestow any responsibility on students to protect the environment. Following are few suggestions for the same

- ✚ There should be much more to environmental education than just classes that promote environmental awareness and homework that requires some writings. Students should be

given more control over the projects so that it makes them understand the purpose of the environmental protection.

- ✚ Provide outside-class opportunities for students.
- ✚ One of the biggest flaws of the educational system is that the educators are very bad role models when it comes to environmental protection. The teachers must be a role model.
- ✚ Strict environmental legislations.
- ✚ Establishing protected environmental areas which execute the scientific, environmental, and economic and entertainment functions.
- ✚ Encouraging students and scholars to carry the scientific researches and statistical graphic surveys which concentrate on the level of environmental awareness and consciousness.
- ✚ Communicating local, state and administrative organizations and bodies; particularly the media in order to find the bases and principles of environmental awareness.
- ✚ Educating about the protection of animal, plant and biological variation, the prevention of drastic hunting and grazing.

Conclusion

In a nutshell, findings of the study indicate that there is a good level of environmental awareness among college students. However, there is need for more action towards improvement of environment conditions rather than just awareness and implementation of strict environmental laws. Only necessary actions can reverse the damages we have caused to our environment and make it a better place for our future generation.

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