



# ENVIRONMENTAL CONSCIOUSNESS AMONG STUDENTS OF HIGHER EDUCATIONAL INSTITUTIONS WITH RESPECT TO ACADEMIC AND SOCIO- DEMOGRAPHIC VARIABLES

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## ABSTRACT

The whole world is facing environmental crisis and this crisis can lead to extreme hardships or perhaps extinction of humanity on this planet. Development of Environmental Consciousness among ourselves is the only way through which we can reduce the problem of environmental crisis. The present study will highlight the environmental consciousness in higher educational institutions. The study attempts to measure the environmental consciousness of students of higher educational institutions with respect to various academic and demographic variables. The present research employs a descriptive survey research design. For the present study the sample consisted of 136 students of higher educational institutions. The data was collected using random sampling technique. The data was collected using self-constructed Likert scale on environmental consciousness. The results were analysed using t test. The study found that females are more environmentally conscious than those of males. However no significant difference in the environmental consciousness was found with respect to locale, stream and educational qualification and students have a moderate level of environmental consciousness. To foster better environmental knowledge, understanding, and skills, to raise environmental consciousness of students in specific and public in general, the importance of environmental education should be emphasised.

**Keywords:** Environmental Consciousness, Environmental Crisis, Environmental Education, Higher Educational Institutions

## 1. INTRODUCTION

The environment is an external medium in which living and inanimate creatures coexists and interacts. Human interaction with the environment has existed since humanity's inception, and it is growing rapidly today in tandem with the human population. Rapid population growth, industrialization, and technological advances have all contributed to an increase in the consumption of natural resources in the environment (Eren & Yaqub, 2015). Natural resources that are consumed unconsciously, as well as excessive consumption of natural resources, cause environmental destruction and contamination. Today we are facing environmental crisis which is the root cause of all the crisis in this world and this crisis can lead to extreme hardships or perhaps

extinction of humanity on this planet. Development of Environmental Consciousness among ourselves is the only way through which we can reduce the problem of environmental crisis. Environmental Consciousness should be the inherent psychological trait among human beings. Environmental Consciousness means, the people who care about all living beings of the Earth, who can act for the sake of nature. The health-conscious person always thinks of what is being eaten, what not, likewise an environmentally conscious person is one who before doing any activity always thinks about consequences that may cause any harm to the environment. According to Zelenzny and Schultz (2000) “Environmental Consciousness consists of a belief system that refers to specific psychological factors related to individuals’ propensity to engage in pro environmental behaviour”. Jiménez-Sánchez and Lafeunte, (2010) gave four dimensions to measure Environmental Consciousness. These are:

- Affective Dimension
- Cognitive Dimension
- Dispositional Dimension
- Active Dimension

General beliefs and values are included in the affective dimension. Personal attitude is included in the dispositional dimension. Active dimension includes pro-environmental behaviour. Cognitive dimension includes knowledge or information. For example, involvement in certain pro-environmental behaviours can be strengthened by attitudes such as a sense of individual duty, which can then reinforce or discourage the addition of pro-environmental engagement to other behaviours. With respect to Cognitive dimension, there are interconnection between specific knowledge or information, personal attitude and general beliefs about how the world operates, gaining environmental information depends on certain values and beliefs, and addition of new knowledge develops these attitudes and values (Jiménez-Sánchez & Lafuente, 2010).

Environmental consciousness is a type of behaviour, thought, and attitude that an individual or community adopts in order to maintain a balanced relationship with the environment. The primary goal of this public awareness is to benefit from the environment while causing no harm to it. The damage to the nature causes a biggest damage or threat to the human beings as well as all other living beings on this earth, for example: Corona Virus, Lumpy Skin Disease, Acid Rain, Water Pollution/Water Scarcity, Air Pollution, Soil Pollution, Land Degradation and many more. This represents a direct relationship between nature and human beings. There is only one Earth that sustains us, it is our responsibility to maintain its sustenance level by adopting the concept of sustainable development. Being environmentally conscious not only leads to the protection of the environment from any harm but also protection of the humanity and biodiversity from extinction.

### 1.1 Review of Related Literature

Various researchers provide valuable insights into the environmental consciousness. Bansal (2010) investigated the role of environmental consciousness, personality, and previous usage in continuing e-book use. The findings revealed that environmental consciousness decreases the preference for using books and increases the preference for using e-books. On the other hand, Mathur & Kumari (2013) researched on environmental consciousness as an indicator of higher consciousness. The attitude towards environment of two groups of people residing in suburban and urban environments is researched and categorized as bio spheric, altruistic, and egoistic. Findings showed that urban sample had egoistic attitude but suburban sample were in close contact with nature show bio spheric attitude. There was also significant correlation seen between egoistic attitude and value of self enhancement in urban people and between bio spheric attitude and the value of self-transcendence for sub-urban people.

Between the 2015-2016 academic year, Dikmenli (2017) conducted research on pre-service teachers' perceptions of consumer Environmental Consciousness from various departments in the faculty of Education at Ahi Evran University. The sample consisted of 70.2% females and 29.8% males. According to the findings, pre-service teachers had a moderate level of consumer environmental consciousness. There was a significant difference in consciousness based on gender and income level, but no meaningful difference in perception

levels was found in relation to the sample's residential area. Similarly, Begum (2020) found that there was still a lack of environmental awareness among undergraduate students in their study on environmental awareness.

Santosa (2020) studied the attitudes of young people towards environmental issues and green products at Trisakti University in Indonesia, using gender as a controllable variable. There was no significant difference in attitudes towards the environment or green products between men and women. A significant relationship was discovered between attitudes towards environmental care and green products, followed by a negative relationship between attitudes towards environmental protection and green products. Furthermore, no statistically significant relationship was discovered between personal norms and attitudes towards green products. Sudibyo and Sutantob (2020) investigated environmental consciousness and corporate social responsibility as drivers of green intellectual capital as well. According to the findings, corporate social responsibility improves green human capital, green structural capital, and green relationship capital, whereas environmental consciousness improves green human capital and green structural capital but not green relationship capital.

Szucs et al. (2021) investigated the perceived and real environmental consciousness and health consciousness of Debrecen University students. According to the findings, students' environmental consciousness was lower (10%) than their health consciousness (18.2%). There was a significant relationship between perceived and actual consciousness. Huang et al. (2022) investigated the impact of environmental awareness on environmental management. The findings show that increased political, integrative, and ethical environmental consciousness has a negative impact on environmental management performance, whereas increased instrumental environmental consciousness has a positive impact.

Hakansson (2022) investigated environmental consciousness in video creation service users in Stockholm. Findings showed that users had overall high environmental consciousness but it found lower in relation to the impact of electricity consumption and video creation. Besides Amador-Alarcon et al. (2022) researched on perceptions on environmental protection of university students: A look through digital competences in Mexico. Results showed that most of the students were aware towards the use of electronic devices for educational purposes cause impact on the environment and therefore it was necessary to adopt some measures and also develop habits for appropriate and optimal use of digital environments. Furthermore Yadav (2022) conducted a study on environmental consciousness among the students of arts and science streams of the higher secondary schools in Rampur District, Uttar Pradesh. The results showed that students had overall good attitude towards environmental consciousness but science students were more environmentally conscious than arts stream students. Gender gap was also found in which girls were more concerned than boys. Urban students were more conscious. On the other hand, private school students had a higher average score than government school students did on an indicator of environmental consciousness.

Review of various researches reflects that environmental consciousness play a significant role in dealing with the environmental issues and challenges. However, there is scarcity of researches on environmental consciousness and specifically in Indian context. Therefore, present research was an attempt to survey about the environmental consciousness of students of higher educational institutions. The study provides valuable inputs for raising environmental consciousness among students of higher educational institutions.

## 1.2 Need and Significance of the Present Study

Due to increase in the global environmental issues like pollution, ozone depletion, acid rain global warming etc., environmental concern is very important in education. Learners must be prepared to understand the current crisis and shape the future. Environmental awareness among higher education students is important for several reasons. UNESCO declares that environmental education must be a core curriculum component by 2025. There is importance of environmental knowledge to solve different environmental problems. Knowledge means it is just the acquaintance with facts and realities. The knowledge which is acquired by the person about his/her environment serve as the base for the development of an alert, concerned attitude along

with intentions to act environmentally friendly, because understanding about causal relationships exists within our environment is very important.

The Stockholm Conference on Human Environment in 1972, the Earth Summit in Rio de Janeiro in 1992, the founding of the Copenhagen Climate Council in 2007, the Montreal Protocol, and the Earth Summits of 2011 and 2012 demonstrate how seriously the international community takes environmental issues. All of the above-mentioned conferences agreed that environmental education is very important to combat the environmental catastrophe by cultivating environmentally aware citizens. A study published in the International Journal of Sustainability in Higher Education found that higher education institutions can play a crucial role in promoting environmental awareness and sustainability among students. The study concluded that "higher education has the potential to shape the minds of young people, preparing them for a more sustainable future" (Nidumolu et al., 2009). Another study published in the Journal of Cleaner Production found that students who are environmentally conscious are more likely to adopt sustainable practices and behaviour. The study suggests that "higher education can foster environmental consciousness, which in turn can lead to more sustainable consumption patterns and behaviour" (Zhu et al., 2019).

Overall, these studies and articles suggest that environmental consciousness among higher education students is significant for promoting sustainability and environmentalism in the future. By instilling a sense of environmental responsibility and awareness in students, higher education institutions can help create a more sustainable and environmentally conscious society. The present study will highlight the environmental consciousness in higher education. The study attempts to measure the environmental consciousness of students of higher educational institutions with respect to various academic and demographic variables.

### 1.3 Variables of the Study

- **Dependent Variable**  
Environmental Consciousness
- **Independent Variables**
  - A. **Socio-Demographic Variables:**
    1. Gender
    2. Locale
  - B. **Academic Variables:**
    1. Stream
    2. Educational Qualification

### 1.4 Objectives of the Study

1. To study the environmental consciousness among students of higher educational institutions on the basis of gender.
2. To study the environmental consciousness among students of higher educational institutions on the basis of locality.
3. To study the environmental consciousness among students of higher educational institutions on the basis of stream.
4. To study the environmental consciousness among students of higher educational institutions on the basis of academic qualification.

### 1.5 Hypotheses of the Study

1. There will be no significant difference in the environmental consciousness of male and female students of higher educational institutions.
2. There will be no significant difference in the environmental consciousness of students of higher educational institutions belonging to the urban and rural areas.
3. There will be no significant difference in the environmental consciousness of students of higher educational institutions belonging to the science and arts stream.

4. There will be no significant difference in the environmental consciousness of postgraduate and undergraduate students of higher educational institutions.

## 2. Research Methodology

The present research employs a descriptive survey research design. For the present study the sample consisted of 136 students of higher educational institutions. The data was collected using random sampling technique. The data was collected using self-constructed Likert scale on environmental consciousness. The tool consists of a total of 40 questions whose responses vary from strongly agree to strongly disagree on a 5-point scale. There are a total of 24 positive items and 16 negative items in the questionnaire. The scoring for positive items ranges from 5 to 1 and vice versa for negative items. The results were analysed using t test.

## 3. Results

S.No.	Variables	N	Mean	S. D	t value	Level of Significance
1.	Male	56	149	17.88	2.47	Significant at .05 level*
	Female	80	156.9	19.03		
2.	Urban	65	151.94	18.16	1.01	Not Significant
	Rural	71	155.21	19.55		
3.	Science	62	153.92	18.96	0.15	Not Significant
	Arts	74	153.42	18.97		
4.	Postgraduates	60	156.23	17.00	1.46	Not Significant
	Undergraduates	76	151.61	20.16		

From the table it can be interpreted that the calculated value of t for male and female students is 2.47 which is less than 2.58 at .01 level of significance but more than 1.96 at .05 level of significance. Therefore, the hypothesis no. 1 stating that “There will be no significant difference in the environment consciousness of male and female students of higher educational institutions” is rejected. Thus, there is significant difference in the environmental consciousness of male and female students of higher educational institutions. Further it can be interpreted from the table that the computed value of t for urban and rural background students is 1.01 which is less than 1.96 at .05 level of significance. Therefore, the hypothesis no. 2 stating that “There will be no significant difference in the environment consciousness of students of higher educational institutions belonging to the urban and rural areas” stands accepted. Thus, there is no significant difference in the environmental consciousness of students belonging to the urban and rural background.

It can again be interpreted from the table that calculated value of t for students belonging to science and arts stream is 0.15 which is less than 1.96 at .05 level of significance. Therefore, the hypothesis no. 3 stating that “There will be no significant difference in the environment consciousness of students of higher educational institutions belonging to the science and arts stream” stands accepted. Thus, there is no significant difference in the environmental consciousness of students belonging to science and arts stream. At last, it can be analysed

from the table that the calculated value of  $t$  for postgraduate and undergraduate students is 1.46 which is less than 1.96 at .05 level of significance. Therefore, the hypothesis no. 4 stating that “There will be no significant difference in the environmental consciousness of postgraduate and undergraduate students of higher educational institutions” stands accepted. Thus, there is no significant difference in the environmental consciousness of postgraduate and undergraduate students.

#### 4. Discussion of the Results

The findings of the study revealed that female students of higher educational institutions have more environmental consciousness than the male students. The study results are in line with the study conducted by Akıllı & Yurtcan (2009) who reported that female students have more positive attitude towards environment than the male students. The results are however in contrast to the study conducted by Yalçınkaya et al. (2014) who in their study reported that no difference in the environmental attitude of preservice teachers with respect to their gender.

The results also found that there is no significant difference in the environmental consciousness of students belonging to the urban and rural locality. However, it has been found that there is difference in their mean scores and students from rural locality have slightly more environmental consciousness than those from urban locality. This could be because the students from rural locality are closer to the nature than those of urban locality. Thus, there is need to put more emphasis on developing environmental consciousness of urban locality.

The results also found that there was no significant difference in the environmental consciousness of students from science and arts stream. This could be contributed to the fact that environmental education becomes the essential part of education irrespective of the stream of the study. However, this is in contrast to the study carried out by Yadav (2022) who reported that science stream students are more environmentally conscious than those from arts stream.

The study also revealed that there is no significant difference in the environmental consciousness of undergraduate and postgraduate students. The results aligned with the study conducted by Joon and Kumar (2009) who reported that there is no significant difference in the level of environmental consciousness among undergraduate and postgraduate students and both have moderate level of environmental consciousness. Therefore, efforts should be made to make students of higher educational institutions more environmentally conscious.

#### 5. Conclusion

The present research provides insights into the level of environmental consciousness of students of higher educational institutions. Students have a moderate level of environmental consciousness, and environmental education and awareness, as well as sustainable development, are critical to achieving a high quality of life (Sarma & Sharma, 2021). Teachers should encourage students to investigate environmental issues and analyse their solutions, as well as guide them in expanding their knowledge of global and local environmental concepts. Students should be encouraged to think critically so that they can apply their theoretical knowledge in their daily lives. Some methods for making students environmentally conscious include lectures, seminars, debates, poster and painting competitions, essay writing competitions, innovation from discarded items, and celebrating World Environment Day.

Environmental education can raise environmental awareness in teachers, students, and the community at large, ensuring that the quality of our environment is preserved between now and the future (Nazir & Pedrett, 2016). Similar studies should be conducted over a longer period of time and with the large sample size. The studies can be conducted to see the impact of environmental education on environmental consciousness. To foster better environmental knowledge, understanding, and skills, to raise environmental consciousness of students in specific and public in general, the importance of environmental education should be emphasised.

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