



## Environmental Awareness and Attitude Towards Environmental Education among College Students of Sikkim

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**Abstract:** *The increasing deterioration of environmental quality is the most dangerous occurrence of the twenty-first century. Due to the population expansion, more people require food, energy, and other necessities like housing, clothing, and transportation. In light of this knowledge, the current study aims to determine students' levels of awareness and attitudes toward environmental education. Further, to know the differences between male and female students concerning environmental awareness, attitude towards environmental education, and also the relationship between these two concepts. The study's sample size was 95 students (43 male and 53 female students) selected by simple random sampling method. In the present study, the descriptive method was used where the survey technique was used to collect data. The tools used were an environment awareness scale and an attitude scale toward environmental education. The data were analyzed by using the following statistical techniques i.e., Mean, Standard Deviation (SD) and t-test, and coefficient of correlation (r). The findings of the study revealed that college students have Environmental Awareness which moderate 37% among very few i.e., 3.16% have a very high level of Environmental Awareness which is a matter of concern. Similarly, the majority 55.79% have a moderate Attitude towards Environmental Education. Consequently, it is crucial to educate students about the environment so that they can protect and conserve it, especially Sikkim's college students.*

**Keywords:** *Environment awareness, attitude, environment education, college students.*

### 1. INTRODUCTION:

The word “environment” implies the sum of all living and non-living things that surround an organism, or group of organisms (“Ecological Problems,” 2008). Everything in the environment that can affect an organism's growth and development is considered to be part of the environment. The environment includes both biotic (all surrounding living species) and abiotic (light, temperature, water, atmospheric gases) factors that influence the observed organism. After some time, the environment frequently changes, and many species are capable of adapting to these changes. However, the tolerance range is not the same with all species and exposure to environmental conditions at the limit of a certain organism's tolerance range represents environmental stress (Bashir, 2015). The State of Sikkim is one very prominent State in successfully creating awareness among various target groups by way of disseminating information and knowledge through connected activities. When we talk about the progress made so far in educating our people on the environment it is essential to know the fundamental nature of why we need protection and preservation of the environment in the first place. In simple terms, we have realized that the environment is degrading day by day for umpteenth numbers of reasons and that we are worried about the present as well as the future generations hence the need to protect and preserve our environment. But who is going to take the onus? Whose role becomes important here? What would be our plans and projects? There is a host of issues that needs to be taken into hand. Moreover, the term ‘Environmental Awareness’ has a broad connotation; it not only implies knowledge about the environment but also attitude. Further, environmental education is the initial step ultimately leading to the ability to carry on responsible citizenship behaviour (Ali, 2016). Akkor and Gunduz, 2017 claimed that environmental awareness is an important condition for studies preventing environmental pollution and environmentally friendly attitudes but it is not sufficient. Environment education is a way of teaching how to protect the environment in which we live, and its importance through systematic and scientific ways as stated by Kabus, 2004 & Kulkoyluoglu, 2000 as cited in Akkar and Gunduz, 2017. In addition, Poonam, (2012), in her study found that there is a significant difference between government and private secondary school students regarding environmental awareness and its components. Akkor & Gundaz, (2017), further found that there is no significant relationship between the gender and environmental attitudes of the students. There is a significant relationship between the gender and environmental attitudes of the students. The environmental attitudes of both male and female students are found to be high in both groups, and the scores of female students are found to be

significantly higher than male students. Ali (2016) in his article reported that there is a remarkable difference in Environmental Awareness between male and female students of technical courses in A.M.U. Aligarh. There is no difference in the knowledge of environmental Awareness of male students of the University Polytechnic and female students of Women's Polytechnic. It is also found that there is no difference in environmental awareness between male and female students of the Department of Engineering of A.M.U. Aubalanga & Shanthi, (2015), found that there is a significant difference between boys and girls at 0.001 level in environmental awareness in favour of girls, and there is a significant difference between boys and girls at 0.05 levels in Air pollution and climate change in favour of girls. Further, there is a significant difference between boys and girls at 0.01 levels in plastics and its effects in favour of girls and a significant difference between boys and girls at 0.05 and 0.01 levels in global warming and ozone depletion and vermicomposting and solid waste management in favour of girls. Likewise, there is a significant difference between boys and girls at 0.001 levels in environmental education for sustainability in favour of girls.

## 2. OBJECTIVES:

The objectives for the present study are as follows

- (1) To find out the Awareness level of college students of Sikkim.
- (2) To study the level of Attitude towards environmental education of college students.
- (3) To know the difference between male and female students in environmental awareness.
- (4) To study the difference between male and female students in attitude towards environmental education.
- (5) To find out the relationship between Environmental Awareness and Attitude towards Environment Education.

## 3. HYPOTHESES:

The study was conducted with the following null hypotheses

- There is no significant difference in environmental awareness between male and female students.
- There is no significant difference between male and female students in attitude towards environmental education.
- There is no significant relationship between Environmental Awareness and Attitude towards Environment Education.

## 4. RESEARCH DESIGN:

**Method:** In the present study descriptive survey method was used.

**Population:** College students from Sikkim are included in the study's population.

**Sample:** 95 college students from various Sikkim colleges made up the study's sample, which was chosen through the use of simple random sampling. 43 of the students are male, and 53 are female.

**Tools:** To carry out the study, the investigator used the Environmental Awareness scale to measure the extent and degree of awareness of Sikkim college students, consisting of 30 items. Each agreed item carries the value of 1 mark and each disagreed item of zero mark. Thus, on the total scale, the scores range from 0 to 30. The attitude scale towards environmental education was used to find out the attitude of college students about environmental education. The scale developed as in the type of 5-point Likert scale. The options of the scale were set as follows; Strongly Agree, Agree, Undecided, Disagree and strongly disagree.

**Statistical Techniques:** The following statistical methods were used to analyse the data: Mean, Standard Deviation (SD), t-test, and coefficient of correlation (r).

## 5. RESULTS:

Based on the score, the level of environmental awareness was examined. As seen in Table 1, the information is expressed in frequency and percentage and compared according to score level. The level of environmental awareness among college students is seen in Table. 1, 27.37 has a moderate level of environmental awareness, 21.06% have a high level, and 21.05% has a low level. Concerningly, just 3.16% of people have a very high level of awareness. A sizable majority of students, 27.36%, have a very low awareness of the environment. In Sikkim, environmental education is taught beginning at the elementary school level, yet this study reveals that college students do not exhibit an appreciative level of environmental awareness.

Furthermore, based on the score, the level of attitude towards environmental education was examined. As seen in Table 2, the information is expressed in frequency and percentage and compared according to score level. Further, Table 2 shows the level of attitude towards environmental education among students. 55.79% have a moderate attitude towards environmental education, while only 17.89% have a high level of attitude towards environmental education. However, 1.05% have a very high level of attitude. And 23.16% have a low level of attitude, while 2.10% have a very

low level of attitude towards environmental education. It has been shown that Sikkim's college students do not have a positive outlook on environmental education.

In addition, using inferential statistics, or the "t-test," the data have been evaluated and interpreted to determine the significant difference. According to the Table.3, male college students' mean scores are 112.14, while female students' mean scores are 115.92. The t-value,  $t(93) = 1.34$ , with a  $df=93$ , is not significant at the 0.05 level. The null hypothesis, "There is no significant difference between male and female students in environmental awareness," is therefore rejected. The outcome demonstrates that gender does not affect environmental awareness.

Similarly, using inferential statistics, or the "t-test," the data have been evaluated and interpreted to determine the significant difference. It can be seen in Table. 4 that the mean score for college male students is 17.92, while it is 16.98 for female students. The t-value,  $t(93) = 1.29$ , with  $df=93$ , is not statistically significant at the 0.05 level. Therefore, it is not acceptable to accept the null hypothesis that there is no significant difference in attitudes toward environmental education between male and female students. The study discovered that gender does not affect attitudes toward environmental education.

Furthermore, using inferential statistics, or Pearson correlation, the data was analysed and interpreted to determine the relationship between environmental awareness and attitude toward environmental education among college students. It can be seen in Table. 5 that there is a low positive correlation that  $r(93) = 0.009$ , which indicates that there is no significant correlation between environmental awareness and attitude towards environmental education among college students, which shows that an increase or decrease in environmental awareness whatsoever has no impact on attitude towards environmental education. Hence, the null hypothesis, "there is no significant relationship between environmental awareness and attitude towards environmental education" is accepted. Therefore, we can infer that the level of awareness does not affect the attitude of respondents.

**TABLES:**

**Table 1**

Frequency & percentage of environmental awareness level among college students

Score Level	f	%	Interpretation
135-145	3	3.16	Very High
125-135	20	21.05	High
115-125	26	27.37	Moderate
105-115	20	21.05	Low
90-105	26	27.36	Very Low

**Table 2**

Frequency & percentage of attitude towards environmental education among college students

Score Level	f	%	Interpretation
25-30	1	1.05	Very High
20-25	17	17.89	High
15-20	53	55.79	Moderate
10-15	22	23.16	Low
5-10	2	2.10	Very Low

**Table 3**

Mean score, SD & t-value of male and female students in environmental awareness

Variable	Sex	n	Mean	Std. Deviation	't' value	Remark
Environmental Awareness	Male	43	112.14	13.945	1.34	Not significant at 0.05 level
	Female	53	115.92	13.559		

**Table 4**

Mean score, SD & t-value of male and female students in attitude towards environment education

Variable	Sex	n	Mean	Std. Deviation	't' value	Remark
Attitude toward	Male	43	17.92	3.72	1.29	Not



<b>Environmental Education</b>	Female	53	16.98	3.35		<b>significant at 0.05 level</b>
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**Table 5**

Relationship between environmental awareness and attitude toward environmental education

Variables		Environmental Awareness	Attitude toward Environmental Education
<b>Environmental Awareness</b>	Pearson Correlation	1	.009
	Sig. (2-tailed)		.930
	n	95	95
<b>Attitude toward Environmental Education</b>	Pearson Correlation	.009	1
	Sig. (2-tailed)	.930	
	n	95	95

## 6. Conclusion :

In the study, it was shown that only a moderate 37% of Sikkim's college students—or 3.16%—have a very high level of environmental awareness, which is cause for concern. Likewise, 55.79% of respondents hold a moderate attitude toward environmental education. Only 1.05% of people say they are highly favourable toward environmental education. Nevertheless, 25.26% of people have an unfavourable attitude toward environmental education. In terms of environmental awareness, male and female college students do not differ significantly. There is no significant difference between male and female college students' attitudes toward environmental education. Environmental Awareness & Attitude Toward Environmental Education are not Affected by Gender. It should be emphasized that college students in Sikkim do not significantly differ in their attitudes toward environmental education and environmental awareness. The study makes the point that more people need to be made aware of the need to safeguard and conserve the environment.

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