

Environmental awareness among High School Students: A study in Majuli District of Assam, India

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ABSTRACT

Rapid industrialization, overexploitation of natural resources and use of environmentally abhorrent materials have caused detectable environmental disruptions which have threatened the life support system. Environment can be protected only by creating awareness among the people so that it becomes part of their lifestyle. Environmental Awareness means showing interest towards environment or environmental problem. It implies not only understanding about environment but also attitude, principles and abilities which are essential for solving environmental problems. Moreover, environmental awareness helps in inculcating responsible behaviour among citizens. The present study is an attempt to study the environmental awareness of high school students with respect to gender and medium of instruction. The present study has used Descriptive research method. 160 students of Majuli district (Assam) were selected as sample of the study. In the present study the researcher has used random sampling technique. Environment Awareness Ability Measure (EAAM) tool prepared by Dr Praveen Kumar Jha was used in the study. The data was analyzed by using descriptive statistics such as mean and standard deviation and inferential statistics like t test. The results revealed that the level of Environmental Awareness of high school students was above average. High school students differ significantly in environmental awareness with regard to the gender. Female high school students showed low environmental awareness among them in comparison to their male counterparts. The study also found that high school students studying in Assamese medium schools have a higher level of awareness regarding the environment in comparison to high school students studying in English medium schools.

Keywords: Environmental Awareness, Gender, High School Students, Medium of instruction

Introduction

Environment sustains life on earth. Besides sustaining life, it also influences the survival, growth and development of mankind and all its activities. However, mankind's uncontrolled desires to attain control over Nature have impoverished the biodiversity, hydrosphere, atmosphere and lithosphere. Rapid industrialization, overexploitation of natural resources and excessive use of environmentally abhorrent materials have caused detectable

environmental disruptions which have threatened the life support system. Such changes may destroy the very existence of life on this earth which evolved over millions of years. Nature has already been damaged to a large extent only because of Human-centric approach of development. Environment can be protected only by creating awareness among the people so that it becomes part of their lifestyle. Environmental awareness can be created among different sections of the society through Environmental Education.

Environment is the aggregate of the external forces, influences and conditions which influence the life, nature, behaviour and the growth, development and maturity of living beings. In fact, environment includes all the conditions, circumstances and influences which surround and affect an organism or a group of organisms. Environmental Awareness means showing interest towards environment or environmental problem. It implies not only understanding about environment but also attitude, principles and abilities which are essential for solving environmental problems. Moreover, environmental awareness helps in creating responsible behaviour among citizens (Ali, 2016; Bhartiya, 2017; Ghosh, 2014).

Environmental awareness enables us to understand and makes us competent to recognize resources in the environment and also the interdependence between different components of environment for growth and development. Infact, environmental awareness may be defined as a process to help the social groups and individuals to gain a variety of experiences and acquire a basic understanding of environment and its associated problems (Akhtar *et al.*, 2010). Environmental awareness implies consciousness or awareness of an individual towards his environment or his surrounding. It enables a person to understand and conserve the interrelations and interactions between the living and non-living system of environment (Goswami and Devi, 2013).

Review of Related Literature

Boiyo (2014) carried out a comparative study on environmental awareness and participation among secondary school students of Kasarani and Kibera Divisions, Nairobi, Kenya. The study found no significant difference in the level of environmental awareness of students in Kasarani and Kibera Divisions. Secondary school students both in Kibera and Kasarani Divisions were found to possess very low level of awareness of current and emergent environmental concepts and problems. Furthermore, the study revealed that there are several civic clubs in secondary school which provide opportunities for students to participate in environmental and other civic activities. Majority of the students in secondary schools in Kasarani and Kibera Divisions were found to be members of a club. But not all members were found to actively participate in club activities. Some of the members never participate in club ac-

tivities. Moreover, no significant difference was found in the level of participation in environmental activities among students in Kibera and Kasarani Divisions. Ghosh (2014) conducted a study on environmental awareness among secondary school students in Golaghat District in the state of Assam and found that male and female secondary school students of Golaghat district in the state of Assam did not differ significantly in environmental awareness. However, rural and urban secondary school students of Golaghat district in the state of Assam were found to differ significantly in environmental awareness. Bordhan (2017) studied the environmental awareness among secondary school students in Kamrup (Metro) District, Assam. Female secondary school students were found to have higher awareness regarding the environment. Urban secondary school students were found to have higher awareness regarding the environment. Secondary school students studying in Assamese Medium schools were found to have a higher level of awareness regarding the environment. Another study was conducted on the environmental awareness among secondary school students in Tamil Nadu by Dhanya and Pankajam (2017). From the findings, it was revealed that 26% of the secondary students have low level of environmental awareness, 48% of the secondary students have moderate level of environmental awareness and 26% of the secondary students have high level of environmental awareness. A comparative study of environmental awareness among secondary level students in Kamrup district (Metro and Rural), Assam was conducted by Barman (2018). The study found that male students of rural area, private school and English medium school were found to be more environmentally aware in comparison to female students of rural area, private school and English medium school. Female students belonging to urban area, Government school and Assamese medium school were found to be more aware to the environmental pollution than respective male students. Medhi (2018) studied the environmental awareness among high school students of Guwahati city of Kamrup district with respect to gender and type of school. The study found no significant difference in environmental awareness among the high school male and female students. However, significant difference was found in environmental awareness of government and private high school students.

Justification of the Study

During present times, global problems such as environmental degradation have increased drastically. Environmental crisis can only be resolved through environmental awareness which should be deeply rooted in the educational system at all levels. This environmental crisis can be resolved only when we make our students, who are the citizens of tomorrow aware about the various environmental issues. Environmental education should be a part of curriculum in all levels of education which will definitely encourage young people to engage in their environment to protect it and can help communities to become more environmentally aware.

Though environmental studies have been undertaken and have been incorporated into the different subjects, many students are still unaware of the environmental problems. Awareness and understanding towards the environment need to be created among the students so as to generate enthusiasm and commitment amongst them which will help them to solve the various environmental problems.

Objectives of the Study

- (1) To assess the environmental awareness among the high school students.
- (2) To assess the difference in environmental awareness of high school students with respect to gender.
- (3) To assess the difference in environmental awareness of high school students with respect to medium of instruction.

Hypotheses of the Study

1. There exists no significant difference in environmental awareness of high school students with respect to gender
2. There exists no significant difference in environmental awareness of high school students with respect to medium of instruction

Delimitations of the Study

- 1) The present study is delimited to only two high schools, i.e. Kamalabari Academy and Milon Jyoti English High School, Majuli (Assam)
- 2) In this study, 160 students of class IX and X which includes 80 male students and 80 female students have been taken.
- 3) Out of 160 students, 80 belonged to the Assamese medium and 80 belonged to the En-

glish medium.

Research Method: The present study has used Descriptive research method.

Sample: 160 students of class IX and X of Kamalabari Academy and Milon Jyoti English High School, Majuli (Assam) were selected as sample of the study. In this study, 160 students of class IX and X which includes 80 male students and 80 female students have been taken. Out of 160 students, 80 belonged to the Assamese medium and 80 belonged to the English medium.

Sampling Technique: In the present study the researcher has used Random sampling technique.

Tool Used: The tool used in the study was Environment Awareness Ability Measure (EAAM) prepared by Dr Praveen Kumar Jha. This scale comprises of 51 items and can be successfully used from 14 to 21 years age group of both sexes. Each item alternative is assigned a weight ranging from 0 (agree) to 2 (disagree) for negative items. In case of positive items, range of weights is reversed from 2 (agree) to 0 (disagree). The score of an individual is the sum total of scores. The range of possible minimum and maximum score is 00 and 102.

Statistical Techniques used: This study has used descriptive statistics like mean and standard deviation as well as inferential statistics such as t test to analyze and interpret the data.

Table 1. Norms have been prepared for the Environment Awareness Ability Measure (EAAM) Scale

Sr.No.	Range of Scores	Awareness Level
1.	99 & above	Extremely High
2.	87 to 98	High
3.	75 to 86	Above Average
4.	59-74	Average/Moderate
5.	47-58	Below Average
6.	35-46	Low
7.	34 and below	Extremely Low

Analysis and Interpretation of Data

Objective-1: To assess the environmental awareness among the high school students.

The following table presents the Environmental Awareness of high school students.

From Table 1, it can be seen that the range 75-86 is considered above average. Thus from the mean value shown in Table 2, we can conclude that the high school students possess above average level of

Table 2. Environmental Awareness among high school students

Variable	Sample	Mean
Environmental Awareness	160	80.62

environmental awareness.

Objective - 2: To assess the difference in environmental awareness of high school students with regard to their gender. The result found on the basis of this objective is shown with the help of the following Table.

Table 3. Mean, S.D and t- values of Environmental Awareness of Male and Female High School Students

Gender	N	Mean	S.D.	t-value	Level of significance
Male	80	83.57	7.96	2.84	significant
Female	80	80.27	6.74		

To test the hypothesis no. 1 of the study 'There is no significant difference in environmental awareness of high school students with regard to their gender', at first mean and standard deviation for both male high school students and female high school students were computed separately and finally 't' value is computed and found to be 2.84 which is significant at both 0.01 and 0.05 level. Therefore, the hypothesis is rejected. So, it can be concluded that there is significant difference in environmental awareness of high school students with respect to gender.

The result of the analysis revealed that there is significant difference among male and female high school students in environmental awareness and this is in contrast with the findings of Ghosh (2014) and Medhi (2018).

Objective-3: To assess the difference in environmental awareness of high school students with regard to their medium of instruction. The result found on the basis of this objective is shown with the help of the following Table.

From Table 4 it is found that the number of students from Assamese medium is 80 and students from English medium is 80 and the mean of Assamese and English medium students is 83.75

and 74.9 respectively and finally 't' value is computed and found to be 5.02 which is greater than 1.96 (at 0.05 level). Significant differences in environmental awareness of high school students were found with respect to medium of instruction. Therefore, the hypothesis is rejected. So, it can be concluded that there is significant difference in environmental awareness of high school students with respect to their medium of instruction.

The result of the analysis found that high school students studying in Assamese Medium schools

have a higher level of awareness regarding the environment and this is in tune with the findings of Bordhan (2017) who also reported similar result.

Findings of the Study

1. The study revealed that majority of the high school students possessed above average level of environmental awareness.
2. There exist significant differences in environmental awareness among male and female high school students. Female high school students showed low environmental awareness among them in comparison to their male counterparts. Hence, male and female students were found to differ significantly in environmental awareness.
3. Significant differences in environmental awareness of high school students were found with respect to medium of instruction. High school students studying in Assamese medium schools showed higher level of awareness regarding the environment in comparison to high school students studying in English medium schools.

Suggestions

Some suggestions for developing environmental awareness among students are given below-

Table 4. Mean, S.D and t- values of Environmental Awareness of Assamese and English medium High School Students

Medium	N	Mean	S.D.	t-value	Level of significance
Assamese	80	83.75	4.51	5.02	Significant
English	80	74.9	15.16		

1. Environmental education helps in creating awareness and developing responsible behaviour of the individual towards the total environment. Therefore, utmost priority should be given on imparting environmental education amongst the students.
2. The curriculum should attempt to create a commitment among students to protect the environment and conserve nature and its resources. The relevance for real life situation should be emphasized at the high school stage.
3. Through Co-curricular activities awareness should be developed among students about different environmental problems.
4. Environmental topics having relation with the problems of the society should be included in textbooks.
5. The teacher should encourage the students to see T.V. programmes, to read newspapers and to hear the radio news as regard to the environment. Environmental teaching aids like charts, models of environment, etc should also used by the teacher for teaching the students about environment.

Conclusion

Different efforts are being taken for inculcating environmental awareness among the students. The Ministry of Environment and Forests (MOEF), Government of India had launched National Environment Awareness Campaign (NEAC). Initially, this campaign was organized in 1986, with the purpose for creating 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 raise awareness and action oriented activities. Different environmental education programmes have also been incorporated at different levels of education. Environmental Education develops proper attitude, awareness and behaviour about the environment among the students and guides them in the right direction. It enables them to realize their obligations towards the environment so that they can contribute significantly towards the protection and conservation of the environment. Environmental Education not only helps students in creating awareness about various environmental issues and implications of their ac-

tion on environment but also enables them to adopt environmentally ethical lifestyles. Therefore, if we want to sustain the beautiful life which we have on earth, and wish to bequeath a clean and safe earth to our posterity, topmost importance should be given on creating environmental awareness amongst the students through environmental education.

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