

A Study on Environmental Awareness and Attitude of College Students

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Abstract - Environmental education is an important context in which to learn about the environment, as well as science—biology, geology, nature—and numerous interdisciplinary, or hybrid fields. Environmental education involves the broad study of changes in earth systems and environmental systems over time. Among environmental education's primary goals are to deepen students' engagement with issues in environment and science such as global warming, biodiversity, sustainability, and sustainable development. Related school to college curricula are directed at increasing students' environmental knowledge and awareness and their overall environmental literacy—knowledge, skills, attitudes, and behaviors—related to the environment. In this paper an attempt has been made to study the awareness and attitude of college students towards environment and related issues. To study this phenomena survey method has been used. The study was conducted on 160 students (80 girls and 80 boys). The students were randomly selected from different colleges of Karimnagar district of Telangana. For the purpose of data collection environmental attitude scale and environmental awareness tests were administered on them. The data was collected personally from the colleges. The collected data are tabulated and computed applying simple statistical tools. The status of EE in higher education system is really not satisfactory and there is a need to standardized and upgrade the education system as a whole. The results revealed that both male and female have equal awareness towards environment and female students are having better attitude towards environment than male students.

Index Terms - Environment, Environmental Education, Higher Education, Awareness and Attitude.

I. INTRODUCTION

Environment and the organisms are two dynamic and complex components of nature. Environment regulates the life of the organisms including human beings. Human beings interact with the environment more vigorously than other living beings. Ordinarily

environment refers to the materials and forces that surround the living organism. Dum (1982) described environment as everything around us air, water, land, plants, animals and microorganisms. Everything that living and non-living constitutes forms environment. Environment includes biotic and abiotic factors. Abiotic factors are the non-living factors and humidity photoperiod topography etc. the chemical factors like chemical composition of atmosphere, water and land. Biotic factors are living factors and include species of animals and plants. The individual of some species and of different species are included in it. Environment is mainly of two types natural environment -physical (Air, water, Soil), Biological and man-made environment -social, cultural and economic. To encourage meaningful public participation and environment, it is necessary to create awareness about environment pollution and related adverse effects. The United Nations conference on Environment and Development held in Rio-de-Janeiro, followed by Earth summit on sustainable Development have highlighted the key issues of global environmental concern and have attracted the general public towards the deteriorating environment.

In India, the University Grants Commission (UGC) decided to introduce Environmental Education as a compulsory subject for all the students of Arts, Science and Commerce in the undergraduate level. The Telangana State Higher Education Council (TSCHE) has introduced a new subject "Environmental Education". The main objective of the subject is to provide an exposure to the students to know more about different aspects of the environment. The intergovernmental conference on environmental education (UNESCO, 1978) recommended the primary categories of environmental education curriculum goals and objectives of (a) awareness,(b) knowledge,(c) attitude,(d) skills, and (e) participation. As early as 1932, George Counts urged educators to

utilize education as an agent of change in order to address social issues of his days.

Overall this process is left in the hand of educated communities that can train their new generations towards becoming responsible citizens of the environment. The present study is aimed at assessing the responsibility performed by the educated communities i.e. students, and also to assure whether the present curriculum of environmental education of TSCHE is sufficient for achieving its goal or not.

Concept of Attitude and Awareness

An attitude is a particular feeling about something. It therefore, involves a tendency to behave in a certain way in situations which involves something. Attitude provides pattern of behavior. These are powerful source of motivation and are capable of arousing and sustaining concentration efforts towards protection of natural resources and reducing environmental pollution (Hooda, 2016). Thurston's View, "Attitude denotes the sum total man's inclinations and feelings, prejudice or bias, per-conceived notions, ideas, fears, threats about any specific topic". Allport's View, "an attitude is a mental or neural set of readiness exerting direct dynamic influence upon the individuals to all objects and situation with it related". An attitude towards the environment means the behavior or concern or interest of the people towards the environment and its problems and development. From the awareness of something people make some beliefs and opinions toward it. In this way, after environmental awareness people make some opinions, ideas and interests towards the environment and its development, which is called their attitude towards the environment (Kaur, 2011). Both Awareness and attitude are interrelated to each other. Awareness gives way to attitude; attitude waves pay for awareness. The more awareness people possess about an object, events or their environment, the more positive and negative.

II.REVIEW OF RELATED LITERATURE

Some Studies related to environmental awareness and attitude towards environment are discussed as below; Choudary (2005) revealed that the girls have high level of awareness and attitude towards environmental education than boys.

Lee (2013) revealed that integrated science teachers attitudes towards environmental education, skills of

teaching environmental education, and intentions of teaching environmental education in integrated science classes were associated with their actual ways of teaching environmental education.

Kose (2015) revealed that undergraduate students had positive attitude towards the environment as regard to their gender and faculty types. It also made that female student were more sensitive towards than male students.

Kaur (2016) found that B.Ed. students possess fairly good level of environmental awareness of students when distributed gender wise and subject wise. It is suggested that curriculum of B.Ed. should be re-organized to meet the challenges. The more favorable attitude they have towards the environment, the more knowledge they would like to gain about nature. Thus, the researcher feels that the environmental awareness and attitude towards environment are deeply correlated with each other.

The above studies revealed that the attitude and awareness of the students towards to environment are significant and not significant.

III.OBJECTIVES OF STUDY

The following objectives were framed in this study:

1. To compare the environmental awareness of male and female students of College.
2. To compare the environmental Attitude of male and female students of College.

IV.HYPOTHESIS OF STUDY

The following hypotheses were tested in this study:

1. There is no significant difference between the environmental awareness of male and female students of College Students.
2. There is no significant difference between the environmental Attitude of male and female students of College Students.

V. METHODOLOGY AND PROCEDURE

Method

This problem can be studied by various method viz. observation methods, which analyse what will be or what will occur in natural condition. By careful observation of the students and their parents for the study period their attitude knowledge and awareness

about environmental education could be easily studied. But this method could not be followed due to the paucity of time at the disposal of the investigator. He used survey method with specifies the present status of the subjects used in any study in terms of conditions, practices, beliefs, attitudes, process, effects or trend etc.

Sampling

In this study the investigator gave due consideration to the term sampling. He felt it very difficult rather impossible to conduct the investigation on a large population due to paucity of time. So he preferred limited sample and a sample, if selected properly, is considered to be a representative of a large whole. To study this phenomena survey method has been used. The study was conducted on 160 students (80 girls and 80 boys). The students were randomly selected from different colleges of Intermediate education, Under Graduate students and Post Graduate Students in Karimnagar district of Telangana. For the purpose of data collection environmental attitude scale and environmental awareness tests were administered on them.

Selection of Tools

Self-constructed questionnaire was used as tools for data collection. The tool was constructed to measure awareness, attitude and knowledge about the environment. Awareness, defined as concern for what is happening in the environment, was examined with a series of questions enquiring about the influences, the perception and concerns of local environmental issues. Attitude, defined as the acquisition of values, feelings and motivation towards the environment, was examined using questions regarding a balance between social responsibility and environmental interest, government regulations and political actions taken to protect the environment. Knowledge, defined as an understanding of the basic fundamentals in the environment, was measured with questions regarding basic fundamental ecological concepts and regional issues.

The investigator administered the scale of environmental awareness and attitude towards environment to male and female students. The statistical techniques were employed to analyze the data in order to test the hypothesis Mean, Standard deviation, t-ratio.

VI. ANALYSIS AND INTERPRETATION OF DATA

Under this heading analysis is done under two headings. It deals with the testing of following hypothesis, “There is no significant difference in environmental awareness of male and female students”. The Mean, S.D. and t-test of male and female for environmental awareness have been given in table.

Table -1 The mean, S.D and t-ratio of male, female students of College Students for Environmental Awareness

Age	Male	Female
16-17	12	15
17-20	35	30
20-22	33	35
Statistics	Values	
Sum	80	80
Count	3	3
Mean	26.6	26.6
Variance	83.518	71.222
Standard Deviation	9.138	8.439
T-ratio	1	

Source: Field Survey

Table 1 shows the value of t with difference of 1. The critical value of t at 0.05 level is 1.98 and 0.01 level is 2.63 and the obtained value is 1 which is less than the table value, this indicates that male and female students does not differ in mean on environmental awareness. The hypothesis is accepted. There is no significant difference between the environmental awareness of male and female students. Thus, the perceptions of the different level of education students are variant among them like intermediate, undergraduate and Post-Graduate towards environment awareness.

Table-2(a) Cross Tabulation between Gender and Environmental Awareness

Sl. No.	Gender	Environmental Awareness			Total
		Low	Moderate	High	
1	Male	0	12 (15.0)	68 (85.0)	80 (100.0)
2	Female	0	8 (10.0)	72 (90.0)	80 (100.0)
3	Total	0	20 (12.5)	140 (87.5)	160 (100.0)

Source: Field Survey

Table -2(b) Environmental Awareness

Chi-Square	Value	df	Significant
	0.33	2	5.99

The above table exhibits that the associations between gender and environmental awareness among respondents have been analyzed through Chi square. The p value is 0.33. The calculated value 0.9 is lesser than the table value 5.99 at 2 degrees of freedom, hence the Cross-table Value (CV) is lesser than Table Value (TV) null hypothesis is accepted. There is no association between gender and environmental awareness. This statistical data is evident that irrespective of gender, students are aware about the environmental protection.

It deals with the testing of following hypothesis, “There is no significant difference in attitude towards environment of male and female students”. The Mean, S.D. and t-test of male and female for attitude towards environment have been given in table 2(a).

Table-3 The mean, S.D and t-ratio of male female students of College Students for attitude towards Environment

Age	Male	Female
16-17	10	13
17-20	30	33
20-22	40	34
Statistics	Values	
Sum	80	80
Count	3	3
Mean	26.6	26.6
Variance	95.296	92.555
Standard Deviation	9.761	9.620

Source: Field Survey

Table-3 shows the value of t with difference of 1. The critical value of t at 0.05 level is 1.98 and 0.01 level is 2.63 and the obtained value is 1 which is lesser than the table value, this indicates that male and female students no differ in mean on attitude towards environment. The hypothesis is accepted. There is no significant difference between the attitude towards environment of male and female students. Girls are having better attitude towards environment and the male students. The study revealed that the female students and male students showed better environmental attitude in the present situation and found that there is no significant difference in attitude among female and male students but there is no

significant difference related to environmental awareness.

Table-4 Showing Coefficient of correlation between Environment Awareness and Attitude towards Environment of College Students. (N=160)

S.No.	Variable	N	r
1.	Environment Awareness	160	0.95*
2.	Environment Attitude	160	

* significant at .05 level

Table 4 shows the coefficient of correlation between environment awareness and attitude towards environment of total sample is 0.95 which is significant and positive at .05 level.

VII.FINDINGS

The findings of the present study are under;

1. There is no difference in the environmental awareness between male and female college students. Both male and female have equal awareness towards environment.
2. There is no significant difference in attitude towards environment of male and female college students. Female students are having better attitude towards environment than male students.

VIII.EDUCATIONAL IMPLICATIONS

1. Teachers and students should aware the environmental protection for which they should teach and learn one Environmental studies and Environmental Education in all levels of education. In this regards, teachers should conduct the awareness programs through NSS and other extra-curricular activities for that Government should encourage for conduct the awareness programs.
2. This shows that environmental education has to be made a compulsory subject at all levels of education, especially at B.Ed. level, all courses in Intermediate, Under-Graduate and Post-Graduation irrespective of all subjects in order to achieve grand success if we want to save our natural environment, the main thing is to educate the masses and the right criteria for this is through channels of education students in school and colleges.

3. Over the course of primary year students should become knowledgeable about a large array of environmental issues. Ideally these issues would be local in nature at early year and expand into more regional, national and international concerns at succeeding level.
4. More and more activities like environmental visits should be involved in environment education in all levels of education from K.G. to P.G. in order to make prospective teachers knowledge towards environment which will further enhance their environment knowledge and sensitivity.
5. Emphasis on interaction with natural environment during individual's early life is important in developing environment knowledge and sensitivity.
6. It would be more beneficial and effective, if special programs are launched to develop environmental awareness among the students. This is possible only through inclusion of special postage on environmental awareness should be provided.
7. Value oriented education in the light of environmental pollution and environment awareness should be provided.
8. The government should make efforts to provide the infra-structure in government schools e.g. proper classrooms, science lab, internet facilities, library facilities etc. for development of scientific temper along pupils.

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