Environmental Awareness and Practices among College Students

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ABSTRACT: This paper mainly focused on environmental awareness and practices related to various factors like causes of pollution, conservation of soil, forest, air, etc., energy conservation, conservation of human health, conservation of wild life and animal husbandry. It also discusses environmental practices among college students with regard to the usage of plastic and its disposal, alternative for plastic, toilet usage, its use in the cultivation of saplings, rainwater harvesting and also their participation in environment related programmes. The target was college students because environmental education is part of their curriculum; they can implement what they learnt. This study will support those who are working with / for the environment related cases. The study is quantitative in nature. It reveals that the level of awareness is high among the respondents irrespective of gender difference but in practice level there is difference between genders i.e. males practicing more than females. This study also proposes some recommendations to safeguard the environment in India.

KEY WORDS: Students, Environmental Awareness, Environmental Practice, Pollution, Conservation

I. INTRODUCTION

The growing concern with environmental issues and their impact on general awareness is one of the most noticeable phenomena of the last two decades. Increase in economic activities in developing countries results in more energy and consumption demand which generally leads to environmental degradation. There is a conventional belief that such environmental degradation would resolve as soon as these countries grow economically, since that would enable them to afford environmental friendly technology as well as proenvironmental regulations and policies. However, several studies indicated that many developing countries already equipped with environmental policies, legal frameworks and economic instruments, which are regarded as highly sophisticated by international standards (Huber et al, 1998, Fujisaki et al, 1997) and yet face the worsening of environmental conditions. Major difficulties these countries confront are not only the lack of legal and economic framework for environmental protection, but also lack of participation among general public in pro environmental behaviors. Some of the environmental problems which are critical at the present are fairly widely known because of the growing awareness of all levels of society, including governments, general public and the scientific community. However, the present study is trying to discuss the environmental awareness and practice among college students in Tamil Nadu. The fact that people from different cultures act with a nationalistic awareness, which is seen as one of the biggest problems of globalization, is taken into consideration. It will be inevitable for us to face the fact that it would not be easy to find a solution to environmental problems. India has more than 40% of young people in the world. The sensitizations and practice of environmental manner is will improve the present environmental conditions.

II. ENVIRONMENTAL PROTECTIONS IN INDIA

The World Bank expert reveals that in the year 1995 to 2010, India has become one of the fastest progressing countries in the world, in addressing its environmental issues and improving its environmental quality. Still, India has a long way to go to reach environmental quality similar to those enjoyed in developed economies. Pollution remains a major challenge and opportunity for India. India has adopted various international and national strategies to solve and mitigate many environmental issues such as Environmental Courts, Environment Friendly Products, Un-leading of Petrol, and Ban on Harmful Pesticides, National Waste Management Council, Public Liability Insurance, and Pollution by Motor Vehicles, Regulation of Sea Shore Hotels, National River Action Plan, Solar Energy Commission, and Prohibition of Smoking in Public Places. Even though, many environmental problems remain unresolved. Environmental issues in India are many. Air pollution, water pollution, soil pollution and wildlife natural habitat pollution challenge India. Tamil Nadu is one of the worst cases in dealing with environment related issues. Mohon. I, (2007) in his study stated that there

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are more than 3000 industrial units in Tamil Nadu which have been classified under the highly polluting or 'red' category. The effluents have caused serious problems in the Palar basin. Similarly, there are a large number of textile bleaching and dyeing units in Tiruppur, Erode, and Karur, which contaminates the Noyyal, Amarayathy and other water bodies. There are five main industrial complexes in Tamil Nadu: Manali/Ennore, Ranipet. Cuddalore, Mettur and Tuticorin which have chemical, petro chemical and other industries. These complexes have also become environmental pollution hotspots. There are cement units, distilleries, sugar, sago, paper, dairying, electroplating, chemical and fertilizers (Agro chemicals), mining industries, ores/mineral processing industries and a variety of other industries which are water consuming and also generate large quantities of effluents. Some of the industries have also provided the treated effluent for irrigation with some degree of success. The professional social worker has a very vital role in environmental issues and generating awareness among people. The priority goes mainly for creating awareness among the students through mass media, campaign, competitions, voluntary work etc., but by viewing the present situations which is happening all over India. The environment is not only concern with ecological aspects, but it also affects the livelihood options for the marginalized groups. As environmental issues are becoming more and more complex and the need to take action becomes more urgent, college students need to be equipped with appropriate skills that can help them to make better decisions and choices (Joseph et al., 2004).

III. ENVIRONMENTAL STATUS IN TAMILNADU

In the context of Tamil Nadu in India, the literacy rate is increasing over many years. It led to the establishment of many number of colleges all over Tamil Nadu, but the quality of education is not up to the mark. Besides, the students studying in colleges should have social dimensions. In this aspect, environmental awareness and practice are given these days. In order to have insightful knowledge on college student's attitude towards environmental awareness and practice, this study was undertaken. Social workers can sensitize the people about the importance of environmental knowledge and pro-behavior for sustainable environment. This can be done by creating awareness among the students through different media and create different paths and encourage them for safe practices. Environment includes all living and non-living objects. We live in the environment and use the environmental resources like air, land and water to meet our needs. Development also means meeting the needs of the people. While meeting the ever-growing needs, we put pressure on the environment. When the pressure exceeds the carrying capacity of the environment to repair or replace itself, a serious problem of environmental degradation happens. If we use any environmental resource such as ground water beyond its limit of replacement, we may lose it forever. Therefore, there is a need to create 'knowledge' about Environmental protection. In the past two decades, Environment has attracted the attention of school and college students in India. They are becoming increasingly conscious of issues such as famines, droughts, floods, scarcity of fuel, firewood and fodder, pollution of air and water, problems of hazardous chemicals and radiation, depletion of natural resources, extinction of wildlife and dangers to flora and fauna. Since, Tamil Nadu incorporated environmental education as part of their curriculum and it's mandatory for all the students irrespective of their curriculum. Therefore, it is important to know the knowledge of environmental awareness among the future generation and their present practice towards environmental protection which leads for sustainable development. This present study is intended to understand the environmental awareness and practice status among the college students.

IV. METHODS AND MATERIALS

The aim of the paper is to measure the level of environmental awareness and habitual practices towards environment among the under graduate regular students with special reference to Arts and Science colleges in Dindigul district, Tamil Nadu.

Objectives

- To measure the environmental awareness level among the college students
- To study the general environmental practices among the college students
- To suggest actions towards creating environmental awareness and environment friendly practice among the college students

This research describes the environmental awareness and environmental practices among the college students. It also provides brief description of the various material practices among the students towards environment. The descriptive design suits to this paper and fulfills the above mentioned aim and objectives. Dindigul is located at $10.35^{\circ}N$ 77.95°E. It has an average elevation of 268 meters (879 feet). It is 130 km from Coimbatore. 100 km from Tiruchirapalli. Dindigul is a municipality in Tamil Nadu state of Southern India. It is the administrative headquarters of Dindigul district. It is also known as "The City of Locks and Tannery", and is a fast growing

tier-4 city in India. It is attracting a great deal of education sector investments. The city also houses a large number of Textiles spinning Mills and leather factories.

The primary and secondary data has been collected. The secondary data were collected from various sources such as books, reports and legislations. For the purpose of collecting primary data, the researcher adopted Standardized scale on Environmental Awareness Ability Measure (EAAMJPK English to Tamil) and self prepared questionnaire on environmental practices were used for collecting primary data. In this research work multi stage sampling method was followed for selecting the respondents from study area. In the 1st stage list of affiliated colleges of Dindigul district functioning under Madurai Kamaraj _University (A State University of Tamil Nadu), Madurai was collected. In the 2nd stage, from the listed colleges, only the colleges started during the academic year of 2007 - 2008 was selected. On that basis five colleges were selected. In the 3rd stage systematic random sampling (hard numbers has been taken) was used to select 3 colleges out of 5 colleges. The total strength of the selected 3 colleges was 559 students. Based on the availability of students only 1st year students were selected. In these 3 colleges there were 244 1st year students, but 210 students were available during the period of data collection, all the 210 students were selected based on census method in the 4th stage of sampling.

V. RESULTS AND DISCUSSION

The researcher presented the collected data with the help of tables. This also intends to do appropriate statistical test over the data to validate the statistical hypothesis which helps in interpreting data, to explain the relationship between gender and environmental awareness as well as correlation between gender and practice which means friendly practice and unsociable practice.

H1: Gender may influences environmental awareness among college Students

H0: There is no association between gender and environmental awareness among college students

Table no: 1 Cross Tabulation between Gender and Environmental Awareness

S.No	Gender	E	nvironmental A	Total	
		Low	Moderate	High	Total
1	Male	0	12(12.76%)	82(87.24%)	94(100%)
2	Female	0	8(6.89%)	108(93.10%)	116(100%)
	Total	0	20(9.52%)	190(90.47)	210(100%)

i abie						
Chi squara	Value	df	Significant			
Chi square	2.076	2	5.99			

*SINGNIFICANT AT 0.05%

P > 0.05

The table no: 1. exhibits that the associations between gender and environmental awareness among respondents have been analyzed through Chi square. The p value is 2.076. The calculated value 2.076 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.

H1: Girls have better practices on environment than boys

H0: There is no different between Gender and environmental practice

Table no: 2. Group Statistics between Gender and Environmental Practice

	Gender	N	Mean	Std.	Std. Error
				Deviation	Mean
environmental practice level	Male	94	9.39	2.14	0.22
	Female	116	8.78	2.32	0.22

Independent sample t-test

macpendent sample t-test						
		Levene'	s Test			
	for Equality of		t-test for Equality of Means			
		Variances				
		F	Sig.	T	Df	Sig.
						(2-tailed)
environmental	Equal	0.376	0.54	1.984	208	0.049
practice level	variances					
	assumed					

The table no: 2. Explains about Independent sample t-test applied to check the difference between gender and environment practice. The p value (0.049) is lesser than significant level (P< 0.05), so the null hypothesis rejected. Since, it is seen that there is a significant difference between gender and environment practice. The environmental practice is much high among the girl students then boy students in the study area.

H1: Higher the environmental awareness among the respondents higher the environmental practice **H0:** There is no significant relationship between environmental awareness and environmental practice

Table no: 3. Correlations between Environmental Awareness and Environmental Friendly Practice

		Total Rank	POSITIVE
Total Rank	Pearson Correlation	1	0.116
	Sig. (2-tailed)		0.095
	N	210	210
POSITIVE	Pearson Correlation	0.116	1
	Sig. (2-tailed)	0.095	•
	N	210	210

The table no: 3. describes that the correlations between environmental awareness and environmental friendly practices among respondents the r value i.e. (r=0.116) is positive number as an indication that both variables, environmental awareness and friendly environmental practice are related in the same direction from each other but it should be noted that there does not appear to exist to any correlation between the correlated variable. The significant Value p=0.095 shows there exist no significant correlation between environmental awareness and environmental practice. Though, environmental education is part of curriculum but students are not practicing commonly in the study area.

Table no: 4. Correlations between Environmental Awareness and Unsociable Environmental Practice

		Total Rank	NEGATIVE
Total Rank	Pearson Correlation	1	0.028
	Sig. (2-tailed)		0.689
	N	210	210
NEGATIVE	Pearson Correlation	0.028	1
	Sig. (2-tailed)	0.689	•
	N	210	210

Table no: 4. Equals that the correlation between environmental awareness and unsociable environmental behavior. The r value i.e. (r = 0.028) is negative number as an indication that both variables, environmental awareness and unsociable environmental practice are related in the same direction from each other but it should be noted that there doesnot appear to exist to any correlation between the correlated variable. The significant Value p = 0.689 shows there exist no significant correlation between environmental awareness and environmental practice.

The researcher started this research work to find out answers for questions whether the college students are aware of environmental issues or not, if they are aware how their practicing in their day to day life. Eventually the researcher came up with answers in the above mentioned questions with support of primary data collected from the respondents. Its shows that gender does not influence environmental awareness which means the result indicates that irrespective of gender college students are aware of environmental issues, at same time Abdo (2010) in his study reveals that Males were shown to be more knowledgeable about environmental issues than females. And also one more study by Fliegenschnee (1998) found that women usually have a less extensive environmental knowledge than men but they are more emotionally engaged, show more concern, show more concern about environmental destruction, believe less in technological solutions, and are more willing to change. When we look into the practice level, gender is influencing as the result of present study shows that the environmental practice is much high among the girl students than boy students in the study area. Another question is whether there is any correlation between environmental awareness and environmental practice thought by the researcher but the results shows that no significant correlation exists between environmental awareness and environmental practice that is to say college students are aware of the environmental issues but when they are going to practice it they fail. Owens, (2000) in his study stated that increases in knowledge and awareness did not lead to pro-environmental behavior. He points out that common sense tells us that changing behavior is very difficult. Anyone who has ever tried to change a habit, even in a very minor way, will have discovered how difficult it is, even if new behavior has distinct advantages over the old one and Fietkau's, (1981) also said knowledge does not directly influence behavior. This is the unique feature of the study undertaken by the researcher.

VI. RECOMMENDATION AND CONCLUSION

The researcher concludes this paper with following recommendation. This study can be further stretched to do research on developing and employing special contemporary environment awareness packages for the students through NSS (or) by forming separate department for conserving environment. The researcher recommends that environmental study should be included in college curriculum and should be taught all students irrespective of their gender. It can be included in their study by adding more practical oriented programmes. They can be sensitized by celebrating special day like world environmental day, wildlife day, world water day, forest conservation day etc., and also knowledge about alternatives for plastic should be imparted and promoted among student population. It should not be mere a study, rather it should become part of their life. It can be achieved through the help of NGOs who are working on environmental issues, social activists, government and Social Work professionals. That is to say students from various disciplines have to work together to create better environment. Social Workers in collaboration with other disciplines can undertake scientific researches to explore unexplored aspects of environments. These are all the recommendations given by the researcher. This research attempted to describes how environmental awareness and practices can be utilized as a tool for sensitizing the young students about environmental protection. Since this study covered various areas of social sciences and it relates environmental awareness and practices, it has focused only on the key literatures in each area. The review highlights the need for Social Work research on environmental awareness and practices among college students. All these findings urge the need to make efforts to provide the necessary facilities for promoting environment awareness and friendly approach to safeguard the environment. This study focused on various aspects of environment, mainly environmental awareness and practice among college students. This paper concludes with relationship between gender and environmental level of awareness and practice level, level of awareness is high but practice level is moderate and there are some differences between gender and practice level among college students.

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