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RESEARCH ARTICLE

AN ANALYSIS OF ENVIRONMENTAL AWARENESS AND RESPONSIBILITIES AMONG UNIVERSITY STUDENTS

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ABSTRACT

Purpose: Earth, Sky, Water and air are the essential factors of life. Form the Vedic period importance has been given to the nature. Saints preach that rivers are our sisters and earth is our mother. In other words, natural factors are important in our day to day life. In this era man has moved towards instant things. He wants to enjoy every comfort in his life at any cost. Lavish consumption of previous environmental resources by man, either due greed of the developed to countries or for need by the poorer people of developing countries, caused a large-scale quality deterioration of environment. This thing has created a lot of environmental problems like global warming, ozone layer depletion, climate changes etc. It is universally accepted that if the present trend of environmental imbalance continues unchecked, it will lead to annihilation of all living beings from this planet. Not only in India, but in other countries too, efforts have been made to deal with some environmental problems. To get rid of environmental problems it is necessary that countries of the world should amend their environment and related policies. The education system should also be upgraded. But without awareness and involvement of people, at grass root level, the environmental problems cannot be solved successfully. The present study was undertaken to find out the environmental awareness and responsibility among University students in Vellore, Tamil Nadu and India.

Design/methodology/approach: Primary data using convenient sampling through questionnaire and interview method and secondary data from wide range of literature through journals have been utilized. The statistical technique of percentage analysis and ANNOVA is used to determine the variables, which determine their behaviour towards environmental awareness and responsibilities among University students.

Findings: The ANNOVA indicates that five variables viz., are you using environmental friendly products (0.037), prevention of water and pollution (0.049), being aware of environmental issues (0.043), ecological concern (0.023) and aware of environmental education, responsibility and laws (0.000) have significant relationship with degree programme of the respondents.

Originality/ Value: A study on an analysis of environmental awareness and responsibilities among University students is the original work of the author.

INTRODUCTION

The unprecedented increase in population and intensity of human activities, which have occurred largely in this century, has been brought about by the growing mastery of science and it's applications. This has produced prosperity, improved standards of life and expanded opportunities beyond what earlier generations could have imagined. But these developments have damaged and deteriorated the ecological systems and caused widespread destruction of natural resources base, on which human life and well being depended. The cooperation of world's people is essential to mitigate or avert these environmental risks. Students constitute a major portion of community. Therefore, student's participation is essential in any environmental programs. The uncontrolled activities of human beings are damaging the healthy environment more and more. In the Indian context, the following are the environmental problems where priority action is needed. Population stabilization, Integrated land use planning, Healthy cropland and grassland, Woodland and re-vegetation of marginal lands, Conservation of biological diversity, Control of water and air pollution, Development of non-polluting renewable energy systems, Recycling of wastes and residues, Human settlement, Environmental education and awareness; updating environmental laws, New dimensions of natural security. These are the important issues that are posing threat to our environment as a whole and to sustainability in

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particular. Now the understanding of the ecology and environmental awareness and responsibilities is essential for the wise management of our planet. As good citizens, we can play a vital role in creating a better environment for the future. It could be a small step like planting trees in more areas or keeping our vehicle exhaust smoke to the minimum or a major step like regulating the dumping of hazardous chemicals and industrial wastes. Come; let's do our bit to create a clear environment. That is the best thing we can leave behind for our future generation. The present study is a significant investigation because it aims to help in measuring and developing environmental awareness and environmental responsibilities among university students. The development of environmental awareness and attitude among students is essential because the country's destination is determined only in the class room. If students are more aware of present global environmental problems, it is very easy to solve all environmental problems like global warming and natural disaster.

2. Environmental Awareness

The sensitivity to the total environment and it's allied problems. The development of environmental awareness means to understand the environmental problems and to develop critical thinking and problem-solving skills in the people.

3. Role of Educational Institutions

Educational institutions play a very important part in the society and can in apt modes propagate these concepts easily – SASP for PAPP – Student Awareness to Student Participation to achieve Public Awareness to Public Participation. Environmental Education has been an area of great concern for the last few years. Environmental Education in colleges and universities is taught as a separate and interdisciplinary subject according to the syllabus framed by National Council for Educational Research and Training (NCERT) since 2004. The main objective of imparting Environmental Education in school curriculum is to create awareness and knowledge, develop attitude, skill and abilities and prepare our students to participate in solving environmental problems. Education is a powerful instrument to control social problems. For the environmental awareness and responsibilities, Union and State governments have made efforts. The programmes conducted should study the level of awareness and attitude of the target group. The study of awareness and responsibilities are mains an important one.

4. Environmental Education and Awareness

Public education, awareness and responsibilities are the key factors in any attempt to maintain a proper balance and ensure sustainable development. Recognizing the potential of Environmental Education as an effective instrument in preventing environmental crises and as an essential element of sustainable development. Indian Environmental Society (IES) has been engaged in spearheading Environmental Education and awareness from the very beginning.

5. Supreme Court of India

Environmental Awareness and Responsibilities – Supreme Court on 22.11.1991, directed the states and other authorities to create environmental awareness among the students through the medium of education and ordered it to be strictly implemented under the supervision of the state authorities. The agencies NCERT were also directed to prepare a module syllabus to be taught at different grades providing for environmental awareness. The Supreme Court judgment in the M.C. Mehta Vs Union of India case requires that the Government of India and all the State governments should include Environmental Education in the curriculum of schools and colleges. The ruling comes into effect from 2004 and all educational institutions are required to introduce environmental studies.

6. Review of Literature

Kukreti (1993) from the studies a lot of environmental problems like global warming, ozone layer depletion, climate changes etc. It is universally accepted that if the present trend of environmental imbalance continues unchecked, it will lead to annihilation of all living beings from this planet. With regard to the environmental responsibilities behaviour, more comprehensive studies were conducted by Klingler (1980), Ramesy and, Hungerford (1989) Sivek and Hungerford (1991), Plamberg and Kuru (2000), Abraham and Arjunan (2005), these researchers conducted meta-analysis research of environmental behaviour. In their investigations the researchers identified some variables that strongly correlated with responsible environmental behaviour. Dharini (2005), a study on student's perception on 'Disaster Management' found that there is a correlation of perception of school students between the natural and manmade disaster management. Gihar (2006) in his study not only India, but in other countries too, efforts have been made to deal with some environmental problems. To get rid of environmental problems it is necessary that countries of the world should amend their environment and related policies. The educations system should also be upgraded. But without awareness and involvement of people, at grass root level, the environmental problems cannot be solved successfully. Shiva Kumar and Mangala S. Patil (2007), findings of another study reveals that the influence of environmental awareness found that students with Environmental Education background had better environmental attitude.

7. Need for the Study

An overview of the foregoing analysis reveals the fact that people especially, students, must be taught the art of living 'environmentally sustainable lives" right from early childhood. The Supreme Court of India has also realized the importance of this "awareness and responsibilities" and commented that people are not living with environmentally sustainable lifestyles due to lack of knowledge, lack of potentially skill or tradition and lack of community spirit. Besides, it is also to be noted that the subject is made with a syllabus that is not inspiring and touching. Under these conditions the students are to be taught the practical skills needed to help and solve the local environmental issues. Environmental Education must be such that the students must themselves bring about a positive change and improve their own surroundings and communities by taking responsibility and become pro-active 'Community-minded Citizens".

8. Objectives of the Study

1. To study the demographic profile of the respondents.
2. To analyze the environmental awareness and responsibilities with regard to pollution and environmental protection among the University students.

9. Hypothesis

Ho: There is no significant relationship between degree programme of the respondents and environmental awareness and responsibilities among the University students.

10. Methodology

The study is based on the primary sources of data which are collected through interview schedule from the students of VIT University, India doing four different degree programme to analyze the environmental awareness and responsibilities among the University students. A convenience sample was used for this study. A total of 185 (143 respondents belongs to India and 42 respondents belongs to Chinese) questionnaires were distributed to the respondents.

Table 4. ANNOVA shows the Relationship between Degree Programme of the Respondents and Environmental Awareness and Responsibilities among University Students

Variables	Source of Variation	Sum of Squares	Df	Mean Square	F	Sig.
A1. Are you using environmental friendly products	Between Groups	19.422	4	4.856	2.619	.037
	Within Groups	333.691	180	1.854		
	Total	353.114	184			
A2. Participating in activities to save the environment	Between Groups	14.542	4	3.636	2.211	.070
	Within Groups	296.020	180	1.645		
	Total	310.562	184			
A3. Economic use of natural resources	Between Groups	13.511	4	3.378	2.152	.076
	Within Groups	282.511	180	1.570		
	Total	296.022	184			
A4. Prevention of water and pollution	Between Groups	12.147	4	3.037	2.437	.049
	Within Groups	224.253	180	1.246		
	Total	236.400	184			
A5. Being aware of environmental issues	Between Groups	18.608	4	4.652	2.520	.043
	Within Groups	332.279	180	1.846		
	Total	350.886	184			
A6. Saving green trees and vegetation	Between Groups	6.456	4	1.614	1.160	.330
	Within Groups	250.431	180	1.391		
	Total	256.886	184			
A7. Ecological concern	Between Groups	14.892	4	3.723	2.911	.023
	Within Groups	230.243	180	1.279		
	Total	245.135	184			
A8. Aware of environmental education, responsibility and laws	Between Groups	271.428	4	67.857	613.052	.000
	Within Groups	19.924	180	.111		
		291.351	184			
	Total					
A9. Aware of environmental accounting and auditing	Between Groups	14.386	4	3.596	1.912	.110
	Within Groups	338.663	180	1.881		
	Total	353.049	184			
A10. Conservation of biological diversity	Between Groups	11.049	4	2.762	1.605	.175
	Within Groups	309.729	180	1.721		
	Total	320.778	184			

Source: Primary data; Output: SPSS 11.5 version

The sample population for the research is defined as all persons including males and females of 18 years and above. The questionnaire consisted of 13 questions (Appendix 1). Section A consists of demographic questions while section B contains five point Likert's scale questions to measure the environmental awareness and responsibilities among the University students. The respondents were required to rate the various statements ranging from 5 (strongly agree) to 1 (strongly disagree). The statistical techniques of percentage analysis and variance of analysis (ANNOVA) is used to determine the variables, which determine their behaviour towards environmental awareness and responsibilities among the University students.

11. Reliability Test

The Chronbach Alpha (α) measuring the internal consistency of the variables is given by the formula:

$\alpha = kr / 1 + (k-1) r$

Where;

k = Items in the scale

r = Average correlation between the pairs of items

The value obtained (0.752) shows good internal consistency among the variables that all the items within the instrument measure the same thing.

12. Analysis and Interpretation

12.1. Demographic Profile – Percentage Analysis Inference

Table 1 shows that out of 185 respondents 37 belongs to B.Com (Computer Applications), out of 185 respondents 40

belongs to 5 year integrated MBA, out of 185 respondents 43 belongs to B. Sc (Computer Science), out of 185 respondents 42 belongs to B.Com (Computer Applications) Chinese students and out of 185 respondents 23 belongs to BCA.

Table 1. Degree Programme of the Respondent

Degree	Frequency	Percentage
B.Com (CA)	37	19.7
5 yr. Integrated MBA	40	21.3
B.Sc (CS)	43	22.9
B.Com Chinese	42	22.3
BCA	23	13.8
Total	185	100

Source: Primary data.

Table 2. Native Place of the Respondent

Native	Frequency	Percentage
Rural	42	22.3
Urban	143	77.7
Total	185	100

Source: Primary data.

Table 3. Gender of the Respondent

Gender	Frequency	Percentage
Male	90	47.9
Female	95	52.1
Total	185	100

Source: Primary data.

Table 2 shows that 77.7% of the respondents belongs to urban area and 22.3% of the respondents belongs to rural area. Table 3 shows that 52.1% of the respondents belongs to female and 47.9% of the respondents belongs to male category.

13. Findings

Table 4 indicates that the calculated significant value of variance of analysis variables: A1 - are you using environmental friendly products with significant value 0.037, A4 - prevention of water and pollution with significant value 0.049, A5 - being aware of environmental issues with significant value 0.043, A7 - ecological concern with significant value 0.023 and A8 - aware of environmental education, responsibility and laws with significant value 0.000 of these five variables is less than the hypothetical value 0.05 (at 5% level of significant). Therefore, the null hypothesis is not accepted. Hence, there is significant relationship between degree programme of the respondents and environmental awareness and responsibilities of the University students. Variables like A2 - participating in activities to save the environment with significant value 0.070, A3 - economic use of natural resources with significant value 0.076, A6 - saving green trees and vegetation with significant value 0.330, A9 - aware of environmental accounting and auditing 0.110 and A10 - conservation of biological diversity with significant value 0.175 of these five variables is more than the hypothetical value 0.05 (at 5% level of significant). Therefore, the null hypothesis is accepted. Hence, there is no significant relationship between degree programme of the respondents and environmental awareness and responsibilities of the University students.

14. Conclusion

Based on the above study, it is conclude that, the majority of the students and not all the students are not having environmental awareness and responsibilities. In order to get awareness about the environment, it is the duty of central and state government; public and private companies and Non-governmental organizations (NGOs) should take initiative serious steps to create more awareness about global warming, natural disaster and environmental degradation. Central and State educational department should allocate more fund to organize conference, seminars and workshops for creating awareness among students at school, college and university level and also insist of all faculties to teach, motivate and inspire the student community, facilities must be equipped with an sufficiently trained and they must posses a high level of awareness about the quality of environment and necessary measures that are to be taken for judicious and sustainable use of environmental resources without any negative externalities. Special attention must be paid to train the non-science faculties with suitable curriculum, so that they can initiate the field level studies to know, assess and adopt suitable measures for safeguarding the quality of environment. Faculties have a greater responsibility of raising the awareness not only among students but also understanding of environmental issues with a view to promote the conservation and wise use of environmental resources and services. They must become active agents of development being equipped with a high level of awareness, attitude and skills.

REFERENCES

Blocker, L.J. and Eckberg, D.L 1989. Gender and Environmentalism: Results from the 1993 General Social Survey. *Social Science*, Quarterly, 78, pp.841-856.

Dharini, P. 2005-06. Students' Perception on Disaster Management. *M. Phil Dissertation* from V.O.C. College of Education, Thoothukudi.

Gihar, S., Saxena, M.K and Kukreti, B.R. 2006. Developing Environment friendly Behaviour Among Student: Role of Video Intervention. *University News,* 44 (12), March 20-26, pp.69-74.

Maurya, Ashwani, 1997. A Study to Observe Awareness on Environment and Energy Resources amongst Tharu Students. M. Ed, Dissertation, *Abstract of Educational Researchers*, Vol.1, Bareilly, IASE, M.J.P. Rohelkhand University.

Muralikrishna, K. 2006. Glimpses of Environment, *V.G.S. Book links,* Vijayawada.

Plamberg, I.E. and Kuru, J. 2000 Outdoor Activities as a Basis for Environmental Responsibility. *The Journal of Environmental Education,* Vol.31 (4), pp.32-36.

Shahnawaj, 1990. A study of Environmental Awareness and Environmental Attitudes on Secondary, Higher Secondary School Teacher and Students. *Ph. D Thesis in Education*, University of Rajasthan, Jaipur.

Shiva Kumar, K and Mangala, S. Patil, 2007. Influence of Environmental Attitude of the Post Graduate Students. *Edutracks- A monthly scanner of Trends in Education,* Vol.6, No.8, pp.34-36.

Shoobeiri, S.M and Prahallada, N.N. 2006. Environmental Awareness among Secondary School Students in India and Iran. *Edutracks- A monthly scanner of Trends in Education,* Vol.5, No.6, pp.27-33.

Sivek, D.J and Hungerford, H.R 1991. Predictors of Environmental Responsible Behaviour in Members of Three Wisconsin Conservation Organization. *Journal of Environmental Education,* Vol.22 (2), pp.35-40.

Srikanta, K Panigrai, 2004. Environment education: Need of the Hour. *Yojana,* Vol.48, No.6, pp.13-22.

World Economic Forum, 2005. Environmental Sustainability Index, Yale University and Columbia University.