



A STUDY ON THE ENVIRONMENTAL CONCEPT ACHIEVEMENT OF HIGHER SECONDARY STUDENTS

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ABSTRACT- Normative survey was adopted for the study with a sample of 300 higher secondary students in Puducherry. Environmental Concept Achievement tool was used to access the level of the higher secondary students. The collected data was statistically analysed using Statistical Package for Social Studies (version- 16) Differential analysis were carried out to study and to check the significant mean difference between variables. The results revealed that the Environmental Concept Achievement of the higher secondary students was average. It was concluded that the Environmental Concept Achievement of the higher secondary students is at average level. It is recommended that the Environmental Concept Achievement of the higher secondary students should be improved through their teaching learning process.

Keywords: Environment, Environmental Concept Achievement.

I. INTRODUCTION

Environmental Education is a learning process that increases the peoples' knowledge and awareness about the environmental and other challenges, develops the necessary skills and expertise to address these challenges and fosters attitudes, motivations and commitments to make informed decision and take responsible actions. Environmental education is the process of recognizing values and clarifying concepts in order to develop skills and attitudes necessary to understand and appreciate the interrelatedness among man, his culture and his bio-physical surroundings. Concern for nature and natural resources is not a new concept for Indians. Admiration for nature and the urge to conserve and protect it has been a part of our civilization. India's wealth of literature, scriptures and folklore are replete with examples which show that our ancestors were environmentally conscious and advocated concepts of sustained usage of resources through many social customs, myths, taboos, traditions and religion. Thus, in traditional society, EE was an integral part of the learning. However, with the onset of industrial revolution resulting in alienation of societies from the natural environment and with changing social relationships, this kind of education has ceased to be a part of the natural learning process. Unrestricted and indiscriminate exploitation of environmental resources necessitated by population growth, poverty, illiteracy, filthy politics and lack of awareness and values among people in India has created ecological imbalance resulting in environmental problems, different types of pollutions and other kinds of ecological disorders. This environmental crisis may become more worsened in the coming days simply because of lack of concern for the common good and the absence of a sense of responsibility for sustaining a balanced eco-system. Therefore, what is required today is education for the people and reorientation of the people towards the desirable attitudes and values, especially those that will lead to a greater concern for preserving balance in the eco-system, besides teaching them how to save the environment from further degradation. Environmental Education is a process of creation of individual and collection commitment to improve the quality of the life through self-knowledge and an understanding of the physical, political, socio-economic and behavioural concerns of man. Moreover, it is a continuous, individual and community education process that is an integral part of the complicated web of communication for human understanding. The role of education is very critical to provide awareness to deal with environmental imbalances. It necessitated to make the students aware of the concept of environment education which is a way of implementing the goals of environmental protection. Actually, environment education helps to develop awareness and understanding of the physical and social environment in its totality. To measure the understanding about the concepts of environment, the present test has been constructed. No doubt the tests to measure attitude towards environment education have been widely used but it is also very significant to know the achievement in the development of concepts regarding environment.

SIGNIFICANCE OF THE STUDY

This study helps to recognize the students understanding level in the environmental concepts, awareness and their behaviour towards environment in the present scenario. The students behaviour towards

environment changes with the concept that is attained during the learning process. It also provides direction for analysing the present environmental issues and to find feasible solution to the problems that they have identified. Understanding of environmental concepts helps the individual students to develop environmentally friendly attitude and behaviour in the society. It also helps the individuals to volunteer and involve in environment related activities that is appreciated in the society.

METHOD OF STUDY

Normative survey method was adopted to study the Environment Concept Achievement of the 300 higher secondary students. Environment Concept Achievement Test of Haseen Taj (2001) was used to study the Environment Concept Achievement of higher secondary students. The background variable namely Gender, Residence, Parental qualification, Parental occupation and Parental income were also taken in order to find out the influence of these variables on Environment Concept Achievement of the higher secondary students.

OBJECTIVES OF THE STUDY

1. To study the level of Environment Concept Achievement of the higher secondary students.
2. To find out the significance difference, if any, between the sub-samples of Gender, Residence, Parental qualification, Parental occupation and Parental Income of the higher secondary students in the Environment Concept Achievement.

HYPOTHESES OF THE STUDY

1. The level of Environment Concept Achievement of the higher secondary students is not high.
2. There is no significant mean difference of higher secondary students in Environment Concept Achievement with respect to Gender, Residence and Parental income.
3. There is no significant mean difference of higher secondary students in Environment Concept Achievement with respect to Parental Qualification and Parental Occupation.

SAMPLING PROCEDURE

The random sampling method was used by the researcher for the present study. The population of the study consists of higher secondary students studying in the schools located in Puducherry. Five schools are selected through stratified random sampling from the list of school using nature and type of institution. 300 higher secondary school students from five different schools were selected for the sample.

TOOLS AND TECHNIQUES

The normative survey method was used for the present investigation. Test constructed by Dr. Haseen Taj named Environment Concept Achievement Test was used as the tool for collecting data. The tool consists of 45 test items, the investigator administered the tool to the sample after getting prior permission from the concerned head of the institutions. The school students were requested to give their free and honest response towards the test items. Each right response carried one mark, otherwise zero marks is awarded.

The reliability coefficient of the total used for the present investigation was found to be 0.61 by Split – half method. The high reliability value ensures high face and content validity.

STATISTICAL TECHNIQUE USED

The collected data were analyzed qualitatively and quantitatively to fulfill the objectives of the study. The researcher used descriptive and differential analysis as a statistical technique for the present study.

II. ANALYSIS AND INTERPRETATION

1. The level of Environment Concept Achievement of the higher secondary students is not high.

Table-1: Level of Environment Concept Achievement among higher secondary students.

N	MEAN	MEDIAN	STANDARD DEVIATION
300	45.56	48.00	9.40

The mean of the total sample is found to be 45.56 for the sample (N=300) with a standard deviation 9.40 which represents average level of Environment Concept Achievement. Hence the null hypothesis framed is rejected.

2. There is no significant mean difference of higher secondary students in Environment Concept Achievement with respect to Gender, Residence and Parental income.

Table-2: t-value of the variables Gender, Residence and Parental income of the higher secondary students.

Variables	Sub variables	N	Mean	Std. Deviation	Mean difference	T-value	Level of significance at 0.05
Gender	Male	182	45.36	8.883	0.524	0.471	NS
	Female	118	45.88	10.170			
Residence	Rural	80	45.21	8.854	0.389	0.478	NS
	Urban	220	45.69	9.603			
Parental Income	< 50,000	239	44.99	9.443	2.832	2.113	S
	> 50,000	61	47.82	8.936			

The analyzed data collected from the sub samples revealed that significant difference exists in the level of Environment Concept Achievement with respect to Parental Income. Hence the null hypothesis stated on Parental Income is rejected and concluded that there is a significant mean difference in Parental Income . On the other hand there is no significant difference in the level of Environment Concept Achievement with respect to Gender and Residence. Hence the Null Hypotheses stated on Gender and Residence is accepted and concluded that there is no significant mean difference with respect to Gender and Residence.

3. There is no significant mean difference of higher secondary students in Environment Concept Achievement with respect to Parental Qualification and Parental Occupation.

Table-3: f-value of the variables Parental Qualification and Parental Occupation of the higher secondary students.

Variables	Sub Variables	N	Mean	Std. Deviation	f-value	Level of significance at 0.05
Parental Qualification	High School	72	43.78	8.751	3.956	S
	Higher Secondary	90	44.52	10.343		
	Higher Education	138	47.17	8.880		
Parental Occupation	Business	64	46.09	9.856	0.166	NS
	Private Sector	152	45.30	8.394		
	Government Sector	84	45.64	10.762		

The analyzed data collected from the sub-samples revealed that significant difference exists in the level of Environment Concept Achievement with respect to Parental qualification and there is no significant difference exists in the level of Parental occupation. Hence the null hypotheses stated on Parental qualification are rejected and Parental occupation is accepted.

III. FINDINGS

- The level of the total sample on Environment Concept Achievement is average.
- There is a significant difference with reference to parental income and parental qualification in Environment Concept Achievement.
- There is no significant difference with reference to gender, residence, and parental occupation in Environment Concept Achievement.

IV. RECOMMENDATIONS

Students must be motivated in volunteering towards environmental activities.

On the basis of the above findings from the study the candidates whose parental income is less than 50,000 are in need to be motivated in participation of environmental activities. The students are to be exposed to real time environmental situations and proper awareness regarding the handling of the situation are to be given as a part of the Environmental Education curriculum in order to help the students gain firsthand knowledge of the phenomenon of the Environment. The best means to make the students understand the various concepts of environment is to provide both formal and non-formal mode of

learning. The students must be encouraged and developed the concepts of environment much with a context based approaches in their learning process which will in turn change the behaviour of the individual students in a positive manner.

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