

# A STUDY OF HIGHER SECONDARY STUDENTS' INVOLVEMENT IN ENVIRONMENTAL MOVEMENT IN RELATION TO ENVIRONMENTAL ETHICS

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## ABSTRACT

*The purpose of this research was to study the higher secondary students' participation in environmental activities in relation to environmental ethics. This study correlates certain demographic variables in respect of environmental ethics and participation in environmental activities. An environmental ethics scale was constructed and validated by Haseen Taj(2001). The Participation in Environmental Activities Scale for higher secondary students was constructed and validated by the investigator (2009), 1000 higher secondary students studying in Virudhachalam Educational District were selected as sample through random sampling technique. The normative survey method is used in the study. The major findings indicate that the higher secondary students have high environmental ethics and higher level of participation in environmental activities and there is significant relationship between environmental ethics and participation in environmental activities of higher secondary students.*

## INTRODUCTION

Environmental ethics is a collection of independent ethical generalizations, not a tight, rationally ordered set of rules. Environmental ethics is a compilation of interrelated independent guidelines – a process field that will be coming together for a long time. The conservation of natural resources is not only the need of the day but also our prime duty. Environmental ethics believes in the ethical relationship between human beings and the natural environment. To take part in an environmental organization or voluntarily involve in various environmental activities is known as participation in environmental activities. We explore whether environmental motivation affects environmental behavior by focusing on volunteering. Environmental motivation has a strong impact on individuals' voluntary engagement in environmental organizations. A higher level of environmental motivation due to higher environmental ethics may lead to a higher level of participation in environmental activities. To achieve the participation of the community, environmental ethics must be provided to the entire community through environmental education.

## REVIEW OF RELATED STUDY

Angela Ebreo, James Hershey, Joanne Vining (1999), have studied "Reducing solid waste linking recycling to environmentally responsible consumerism". Respondents' self-reported recycling behaviors were

found to be related to source reduction and recycling. The results indicated that respondents were most concerned about product toxicity and least concerned about product packaging. Ben A. Minter, and James P. Collins (2005), have carried out research on "Why we need an ecological ethics" The result of the study is Ecological Ethics will fill an important gap in the practical and professional ethics literature, as well as provide ecological researchers and managers with a critical support network and resource base to improve ethical decision making.

Little Flower (2006), conducted a study on "Environmental awareness and environmental ethics of higher secondary school students in Pondicherry, India" and found that the higher secondary school students possess a high level of environmental awareness. It was found that there is significant difference between male and female higher secondary school students.

## NEED FOR THE PRESENT STUDY

Environmental ethics is about including the rights of non-human animals in our ethical and moral values. We,

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the human beings, along with the other forms of life make up our society. We all are a part of the food chain and are thus closely associated with each other. We, together form our environment. The conservation of natural resources is not only the need of the day but also our prime duty. But we are going against the true ethical and moral values by disturbing the balance in nature. We are being unethical in treating the plant and animal life forms, which coexist in society. The involvement in environmental movement is broad in scope and can include any topic related to the environment, conservation, and biology, as well as preservation of landscapes, flora, and fauna for a variety of purposes and uses. By knowing the values of environmental ethics one can actively participate in environmental movements.

**OBJECTIVES OF THE STUDY**

1. To study the significance of the difference in respect of higher secondary students' environmental ethics, if any, between the sub samples with regard to a) Gender, b) Location of the school c) Subject group
2. To study the significance of the difference in respect of higher secondary students' involvement in environmental movements, if any, between the sub samples with regard to a) Gender, b) Location of the school c) Subject group
3. To study the significant relationship, if any, between environmental ethics and involvement in environmental movement by higher secondary students.

**HYPOTHESES OF THE STUDY**

1. There is no significant difference in the environmental ethics of higher secondary students between the following sub samples a) Gender, b) Location of the school c) Subject group
2. There is no significant difference in the involvement in environmental movements by higher secondary students between the following sub samples a) Gender, b) Location of the school c) Subject group
3. There is no significant relationship between environmental ethics and involvement in environmental movement of higher secondary students.

**METHODOLOGY**

Normative Survey Method has been used in the study.

**Tools used**

1. Environmental ethics scale constructed and validated by **Haseen Taj (2001)**.
2. An involvement in environmental movement scale for higher secondary students was constructed and validated by the investigator (2009).

**Sample of the study**

The random sampling technique has been used in the selection of the sample and as many as 1000 (+1) XI standard students of Higher Secondary Schools in Virudachalam Educational District were chosen as the sample. There are 31 Government Higher Secondary Schools, 6 Aided Higher Secondary Schools, and 19 unaided Higher Secondary Schools in Virudachalam Educational District. Out of these Higher Secondary Schools as many as 19 Higher Secondary Schools were chosen. All the available Higher Secondary Schools students studying in each of these selected Higher Secondary Schools were chosen as the sample.

**Statistical technique used**

Differential analysis and Correlation analysis were used in the present study to test the hypotheses and interpret the data.

**ANALYSIS OF DATA**

**Differential analysis**

**Hypothesis 1**

There is no significant difference in the environmental ethics of higher secondary students between the following sub samples a) Gender, b) Location of the school c) Subject group

**Table 1**

**SIGNIFICANCE OF THE DIFFERENCE IN THE SUB-SAMPLES OF HIGHER SECONDARY STUDENTS' ENVIRONMENTAL ETHICS AND INVOLVEMENT IN ENVIRONMENTAL MOVEMENTS – GENDER AND LOCATION OF THE SCHOOL**

Variables	N	Environmental ethics				Involvement in environmental			
		Mean	SD	t-value	Sig*	Mean	SD	t-value	Sig*
Gender	Male	497	107.5	12.8		27.24	4.74		S
	Female	503	108.1	12	0.8	NS	28.1	4.6	2.93 (0.01 level)
Location of the school	Urban	467	107.4	12.4		27.42	4.63		NS
	Rural	533	108.2	12.4	1	NS	27.89	4.73	1.6 (0.05 level)

\*Significant at 0.05 level, NS - Not significant, S – Significant

**Environmental ethics**

Since the calculated t- value ( 0.80) is less than the tabulated t- value, hypothesis no.1(a) is accepted. Since the calculated ‘t’ value (1.00) is less than the tabulated ‘t’ value, hypothesis (b) is accepted.

**Involvement in environmental movements**

Since the calculated t- value (2.93) is higher than the tabulated ‘t’ value, hypothesis 2(a) is rejected. Since the calculated ‘t’ value (1.60) is less than the tabulated t- value, hypothesis 2(b) is accepted.

**Table 2**

**SIGNIFICANCE OF THE DIFFERENCE IN THE SUB-SAMPLES OF HIGHER SECONDARY STUDENTS’ ENVIRONMENTAL ETHICS – SUBJECT GROUP**

Variables	Sources of variation	Sum of squares	df	Mean square	F Value	Re mark
Subject group	Between groups	22.53	2	11.26	0.07	Not Significant at 0.05 level
	Within groups	153871	997	154.33		

Above table denotes that there is no significant difference among the higher secondary students who belong to different subject groups with respect to their environmental ethics. Null hypothesis 1(c) is therefore accepted.

**Table 3**

**SIGNIFICANCE DIFFERENCE IN THE SUB-SAMPLES OF HIGHER SECONDARY STUDENTS’ INVOLVEMENT IN ENVIRONMENTAL MOVEMENT – SUBJECT GROUP**

Variable	Sources of variation	Sum of squares	df	Mean square	Calculated F Value	Remark
Subject group	Between groups	219.18	2	109.59	5.03	Significant at 0.01 level
	Within groups	21717.6	997	21.78		

From the above table, it was found that there is a significant difference among the higher secondary students who belong to different subject groups with respect to their involvement in environmental movements. Null hypothesis 2(c) is therefore rejected. There is a need to conduct ‘t’ test.

**Table 3(i)**

**SIGNIFICANCE OF THE DIFFERENCE BETWEEN THE MEANS OF THE INVOLVEMENT IN ENVIRONMENTAL MOVEMENT SCORES OF SCIENCE AND ARTS HIGHER SECONDARY STUDENTS**

Variable	Sub-samples	N	Mean	SD	Calculated ‘t’ Value	Re mark
Subject Group	Science	590	28.03	4.52	3.11	Significant
	Arts	261	26.94	4.93		

From the above Table it is observed that the ‘t’ value is 3.11, which is significant at 0.01 level. It is inferred that both science and arts group higher secondary students differ significantly in their involvement in environmental movements.

**Table 3(ii)**

**SIGNIFICANCE OF THE DIFFERENCE BETWEEN THE MEANS OF THE INVOLVEMENT IN ENVIRONMENTAL MOVEMENTS SCORES OF SCIENCE AND VOCATIONAL SUBJECT HIGHER SECONDARY STUDENTS**

Variable	Sub-samples	N	Mean	SD	Calculated ‘t’ Value	Remark
Subject Group	Science	590	28.03	4.52	1.18	Not Significant
	Vocational	149	27.53	4.75		

From the above Table it is observed that the ‘t’ value is 1.18, which is not significant at 0.05 level. It is inferred that both science and vocational group higher secondary students do not differ significantly in their involvement in environmental movements.

Table 3(iii)

**SIGNIFICANCE OF THE DIFFERENCE  
BETWEEN THE MEANS OF THE  
INVOLVEMENT IN ENVIRONMENTAL  
MOVEMENTS SCORES OF ARTS AND  
VOCATIONAL SUBJECT HIGHER  
SECONDARY STUDENTS**

Variable	Sub-samples	N	Mean	SD	Calculated 't' Value	Remark
Subject Group	Arts	261	26.94	4.93	1.19	Not Significant
	Vocational	149	27.53	4.75		

From the above Table it is observed that the 't' value is 1.19, which is not significant at 0.05 level. It is inferred that both arts and vocational group higher secondary students do not differ significantly in their involvement in environmental movements.

### CORRELATION ANALYSIS

Table 4

**CORRELATION CO-EFFICIENT BETWEEN  
ENVIRONMENTAL ETHICS AND  
INVOLVEMENT IN ENVIRONMENTAL  
MOVEMENTS OF HIGHER SECONDARY  
STUDENTS**

Variables	N	'r' Value	Inference
Environmental ethics	1000	0.39	Significant 0.01 level
Involvement in environmental movement			

The correlation co-efficient (r) between environmental ethics and involvement in environmental movements is found to be 0.390 for the sample of 1000 of higher secondary students. It is higher than the table value of 0.081 at 0.01 level. It is concluded that there is significant relationship between environmental ethics and involvement in environmental movements of higher secondary students. Hence null hypothesis 5 is rejected.

### MAJOR FINDINGS OF THE STUDY

#### Differential Analysis

1. The male and female, urban and rural school higher secondary students do not differ significantly with respect to their environmental ethics.
2. There is no significant difference among the higher

secondary students who belong to different subject groups with respect to their environmental ethics.

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3. The male and female higher secondary students differ significantly in their involvement in environmental movements.
4. The urban and rural school higher secondary students do not differ significantly in their involvement in environmental movements.
5. There is a significant difference among the higher secondary students who belong to different subject groups with respect to their involvement in environmental movements. The science and arts group of higher secondary students differ significantly in their involvement in environmental movements. The science and vocational group higher secondary students do not differ significantly in their involvement in environmental movements. The arts and vocational group higher secondary students do not differ significantly in their involvement in environmental movements.

#### Correlation Analysis

There is a significant relationship between environmental ethics and involvement in environmental movement of higher secondary students.

#### REFERENCE

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