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CLIMATIC CHANGE AND THEIR ENVIRONMENTAL EDUCATION AWARENESS OF HIGHER SECONDARY SCHOOL STUDENTS

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Abstract

The study was conducted on 1000 higher secondary students to study their knowledge of climatic change and environmental education awareness with respects to their gender and Studying different subjects. The self made questionnaire was used to collect the data for climatic change knowledge which was treated with statistical techniques. The results of the study reveal that, both the level of knowledge of climatic change and environmental education awareness of the higher secondary students are average. Further, there is significant difference between male and female, and a student studying different subjects. There is significant correlation between climatic change knowledge and environmental education awareness.

Keywords: Climatic change knowledge, Environmental education awareness, Product-moment correlation.

INTRODUCTION

Climate change is one of the greatest threats facing humankind today. This is because it has a lot of implications for the survival of man. As an ecological being, man needs conducive environment for effective and fruitful living. Knowledge can make a positive impact on science by actually assisting scientists in their research. This may not always be the case as many communities, especially those living in developing countries, may only need scientific knowledge to help inform decision-making and policy in order to mitigate disaster. Environmental education awareness helps the social groups and individuals to gain a variety of experiences in and acquire a basic understanding of environment and its associated problems. World Educators and Environmental specialists have repeatedly pointed out that any solution to the environmental crisis will require environmental education awareness and understanding to be deeply rooted in the educational system at all levels. Hence, the investigator decided to measure climatic change knowledge and the Environmental education awareness among higher secondary students in Pondicherry region.

REVIEW OF LITERATURE

Eva-Lotta Sundblad (2008) observed the knowledge of both health consequences and causes of climate change was positively related to cognitive and affective risk judgments. Moreover, the results support the claim that both knowledge and confidence levels will increase when people learn more about climate change and the Planning Institute of Jamaica (2012), reported on climatic change knowledge, attitude the results revealed that most persons have heard the term “climate change”. From the list of probable causes presented on the questionnaire, deforestation and improper disposal, such as burning garbage, were the two most commonly selected causes, with 80% choosing these two responses as causes of climate change. From the above reviews, Resources used mostly often awareness, attitude, and few studies only on knowledge of climatic change. More over knowledge tested on effects of climatic change. But in the case of causes of climatic change and environmental education awareness focused only limited factors. Under such circumstances the researcher is prompted to measure the knowledge of climate change knowledge among the higher secondary students.

OBJECTIVES OF THE STUDY

The investigator has formulated the following objectives. To study

1. The level of knowledge of climatic change and environmental education awareness of higher secondary students,
2. The significant difference in the knowledge of climatic change and environmental education awareness between the male and female higher secondary students,

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3. The significant difference in the knowledge of climatic change and environmental education awareness among the higher secondary students studying in Arts, Science and Vocational subject,
4. The nature of relationship between the knowledge of climatic change and environmental education awareness of higher secondary students,

HYPOTHESES OF THE STUDY

1. The level of knowledge of climatic change and environmental education awareness is low.
2. There is no significant difference in the knowledge of climatic change and environmental education awareness between the male and female higher secondary students.
3. There is no significant difference in the knowledge of climatic change and environmental education awareness among the higher secondary students studying in Arts, Science and Vocational subject.
4. There is no significant relationship between the knowledge of climatic change and environmental education awareness of higher secondary students.

METHODOLOGY

Sample of the Study:

Random sampling technique was used in the selection of the sample of as many as 1000 higher secondary students studying in Higher Secondary schools situated in the Pondicherry region, India.

Tools Used:

Knowledge of climatic change test constructed and validated by the investigators (2013) and Environmental education awareness test - constructed and validated by Dr. Vipinder Nagra (2010).

Statistical Techniques Used:

The investigators used descriptive analysis, differential analysis and correlation analysis for testing hypotheses.

ANALYSIS AND INTERPRETATION OF THE DATA

Table 1. Mean and Standard Deviation for Climatic Change Knowledge Score of Whole Group

Variables	N	Mean	S.D	Level
Knowledge of Climatic change	1000	37.30	9.38	Average
Environmental education awareness	1000	53.27	7.40	Average

It is inferred from the above table that the level of knowledge of climatic change and environmental education is average.

Table 2. Mean Difference between Male and Female Higher Secondary Students in their Knowledge of Climatic Change and Environmental Education Awareness

Variables	Sub – samples	N	Mean	S.D	‘t’ Value	Significance at 0.05 level
Climatic change knowledge	Male	444	36.55	9.33	2.262	Significant
	Female	556	37.89	9.38		
Environmental	Male	444	52.65	7.26	2.40	Significant



education awareness	Female	556	53.77	7.48
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It is inferred from the above table there is significant difference in the knowledge of climatic change and environmental education awareness between the male and female higher secondary students.

Table 3. Difference among the Higher Secondary Students Studying Different Subject in their Knowledge of Climatic Change and Environmental Education Awareness

Variables	Source of variation	Sum of squares	df= 2,998	Calculated F value	Significance at 0.05 level
			Mean square		
Climatic change knowledge	Between	1041.529	520.764	5.979	Significant
	Within	86830.855	87.092		
Environmental education awareness	Between	1118.569	559.284	10.40	Significant
	Within	53607.447	53.769		

It is inferred from the above table that there is significant difference in the knowledge of climatic change and environmental education awareness among the higher secondary students studying in Arts, Science and Vocational subject.

Table 4. Correlation between Knowledge of Climatic Change and Environment Education Awareness

Pairs of Variables	N	"r" Value	Significance at 0.05 level
Knowledge of climatic change and Environmental education awareness	1000	0.77	significant

It is inferred from the above table that there is significant relationship between climatic change knowledge and environmental education awareness of higher secondary students.

FINDINGS OF THE STUDY

- The level of knowledge of climatic change and environmental education are average.
- There is significant difference between the Boys and Girls in the level of knowledge in Climatic change and environmental education awareness. The Girls are better than the Boys in their level of knowledge Climatic change and environmental education awareness.
- There is significant difference between the students studying arts, science, and vocational subject in their level of knowledge in Climatic change. The students studying in science subject are found to be better than their counterparts.
- There is significant relationship between the climatic change knowledge and Environmental education awareness of the higher secondary students.

CONCLUSION

Only very few studies have been conducted keeping the higher secondary students' climatic change knowledge as the dependent variable and environmental education awareness as independent variable. Majority of the higher secondary students are found to be in the average level in their knowledge in climatic change and



majority of the same sample of students are found to in the average level in their environmental education awareness. Suitable activities and curriculum related to environment that are developed and used by the teachers would certainly bring proper attitudes in the minds of the students. Ultimately, this attitudinal change will improve the climatic change knowledge and environmental education awareness of the students.

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