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A Study on Higher Secondary Students Knowledge on Climatic Change Knowledge in Relation to Environmental Attitude

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Abstract

As climatic change becomes a threatening force to the mankind. Climatic change knowledge is essential for the successful for the adaptation and mitigation. In this view point, the researcher has undertaken this study. The present study was conducted in Puducherry and 300 higher secondary students were selected. Normative survey method was adopted; simple random sampling technique was used in selecting the samples. The result revealed that the level of climatic change knowledge is average and more favourable environmental attitude among higher secondary students and there is significant relationship between climatic change knowledge and environmental attitude among higher secondary students.

Keywords: Climatic change knowledge, environmental attitude, normative survey

Introduction

Man can't live without environment .man decorticated environment by many ways and this lead to environmental degradation among these various environmental issues climatic change is the recent one for the developing countries like India. Alex and Preedip Balaji [1]pointed out in their article, for the adaptation and mitigation process knowledge is the important factors. Prior to imparting knowledge there must be a need to assess the present level. Imparting knowledge to the higher secondary students is very important because they are the transfer of knowledge to the next generation as well as active participation in the environmental issues .Environmental attitude is the important factors that will enhance the students to getting knowledge about climatic change.

Over the last few years there has been an increase in the need for knowledge on climatic change. However, very little has been published to date on climatic change knowledge. It has been reported [2] that knowledge about climate change science significantly affects opinions about climate change. However, the percentage of correct answers was still below 60 % indicating an urgent need for improving climate change science education. Environmental attitude is the important environmental factors which closely related to climatic change knowledge because proper attitude will develop a better understanding of environmental issues like climatic change knowledge. Higher secondary students are the stimulating force in the environmental issues. Moreover, higher secondary students plays vital participation in the environmental remedial and mitigation because they are the future citizens of the country builders of teachers, hence investigator conducted this present study.

Method and sample of the study

In this present study researcher adopted normative survey method. By using random sampling technique 300 teacher educators were selected form 16 higher secondary schools in Puducherry region.

Objectives of the study

The objective of the study was to study the following hypothesis:

1.)The level of climatic change knowledge of higher secondary students is low.

2.)The environmental attitude of higher secondary students is less favourable.

3.)There is no significant difference between the male and female higher secondary students with respect to the climatic change knowledge and environmental attitude.

4.)There is no significant relation between climatic change knowledge and environmental attitude of higher secondary students.

Tool used for the study

The investigator used climatic change knowledge test constructed and validated by the investigator with help of guide and environmental attitude scale by Haseen Taj[3] used.

Results

The mean of climatic change knowledge of higher secondary students for the 300 sample was 40.35 with standard deviation 8.55.which is laid between the score of 26 and 50.It is concluded that higher secondary students are having average level of climatic change knowledge which is similar to the findings of Aaron McCright's studies [4] the effects of gender on climate change knowledge and concern in the American public. (Table 1).

The mean of environmental attitude of higher secondary students for the 300 sample was 174.73 with standard deviation 22.76.which is above the mid score of 122 .It is concluded that higher secondary students are having more favourable level of environmental attitude (Table 2).

The result of the hypothesis showed that the calculated't' values. According to Henry E. Garrett [5], the calculated values are lesser than the table value 1.98 at 0.05% level of significance. Therefore, the hypothesis is hereby accepted. This implies that there is no significant difference between Male and Female higher secondary in respect of their climatic change knowledge and environmental attitude (Table 3).

The result of the hypothesis showed that the calculated 'r' value of 0.514. According to John W. Best and James V. Kahn [6], this is greater than the table value at 0.01% level of significance. Therefore, the hypothesis is hereby rejected. This implies that there is significant relationship between climatic change knowledge and environmental attitude of higher secondary students (Table 4).

Conclusion

From the above analyses, we concluded that climatic change knowledge among higher secondary students is average and the environmental attitude is more favourable. Policy makers and other educationist have a crucial role to play

in enhancing greater engagement in environmental issues. There is need for imparting climatic change knowledge for this we have separate curriculum like environmental education should be insisted and teachers should develop more positive attitude towards environment.

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Tables

Table 1: Mean and standard deviation scores of climatic change knowledge of higher secondary students (Hypotheses testing no: 1)

Variable	Sample	Mean	Standard deviation
Climatic change knowledge	300	40.35	8.55

Table 2: Mean and standard deviation scores of environmental attitude of higher secondary students (Hypotheses testing no: 2)

Variable	Sample	Mean	Standard deviation
Environmental attitude	300	174.73	22.76

Table 3: Difference in climatic change knowledge and environmental attitude of higher secondary students with regard to Gender (Hypothesis No 3)

Variables	Gender	Sample	Mean	Standard deviation	't' value	level of significance
Climatic change knowledge	Male	140	40.16	8.80	0.357	Not significant
	Female	160	40.51	8.35		
Environmental attitude	Male	140	175.77	21.11	0.750	Not significant
	Female	160	173.81	24.13		

Table 4: Relationship between climatic change knowledge and environmental attitude of higher secondary students (Hypothesis no 4)

Variables	N	'r' value	level of significance
Climatic change knowledge and environmental attitude	300	0.514	Significant