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Evaluation Of Perception, Awareness of Secondary School Teachers with Environmental Education with Special Reference to Hooghly District, West Bengal

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ABSTRACT

Environment can be defined as the outer physical, biological and social systems in which we leave the total environment is a complex entity. The three approaches that have contributed to the current article have nearly universally been labelled as environmental education, either from or for the environment. Environmental education refers to learning about, in, and about the environment. In the context of the environment and education, terms like Environmental Education (EE), Environmental Study (ES), and Environmental Approach (EA) are commonly used. This article highlights about the perception, awareness of secondary school teachers with environmental education with special reference to Hooghly District, West Bengal.

Keywords: Perception, Awareness, Teachers, Education, Hooghly

INTRODUCTION:

The goal of environmental education is to raise public awareness of the problems that exist in this field, as well as possible solutions, and to lay the groundwork for individuals to be fully informed and active participants in environmental protection and the prudent and rational use of natural resources [1-3]. Environmental education focuses on man's relationship with his natural, social, and man-made environments, as well as the relationships between population, industrialization, pollution, resource allocation and depletion, conservation, transportation, technology, energy, and urban and rural planning [4-5]. With this in mind, the nexus of environmental education is multidisciplinary in nature, and its essence is a commitment on the part of one and all, on the part of all of us who inhabit this planet earth, to prevent deterioration of the air, water, land, and physical and social environment, including interrelationships between people, so that a nuclear war, chemical warfare, or any other cataclysm caused by man does not destroy the world [6-8].

OBJECTIVE:

The main objective of the research was to study and compare the perception, awareness of secondary school teachers with environmental education in Hooghly district, West Bengal.

HYPOTHESIS:

[1]H0: There will be no significant differences between the perceptions and awareness of secondary school teachers about environmental education in Hooghly district of West Bengal.

RESEARCH METHODOLOGY:

Area of the Study:

Tarakeswar and Arambagh blocks of Hooghly District are purposively selected for area of the study.

Universe of the Study:

All the enrolled students, teachers of Secondary schools of Tarakeswar and Arambagh blocks were the universe of the study.

Unit of the Study:

Each respondent was the unit of the study.

Sampling Design:

Two blocks were selected from Hooghly district of West Bengal. All the Secondary schools in each block were grouped into a cluster. Two clusters were formed from each block. Five Secondary school were selected from random clusters. From each school 10 students were selected from each class from 7th to 10th. In overall 400 students were selected totally, whereas 100 parents of the children were taken for the study, 400 teachers were also taken from each sample schools. Details about the sample are given in the table 1 below:

Table No. 1: Area wise distribution of sample

S. No.	Areas	Name of Sample	Number of samples
1	Tarakeswar & Arambagh	Students	400
2		Teachers	400
3		Parents	100
	Total	Over all	900

Tools Used:

- Environmental Awareness Test for Teachers (EATT)
- Environmental Awareness Scale (EAS)
- Reaction Scale for Teacher, Students and Parents Towards Environmental Education

Selection of Schools:

Table 2: Details about Name of Blocks, Number of schools selected from each block, parents, teachers and students

Name of Block	No. of School in each block	No. of Teachers	No. of Students	No. of Parents

Tarakeswar	26	256	218	70
Arambagh	15	144	182	30

Table 3: No. of students from different types of school i.e Govt. & Private

Govt. school	**Private school**
205	195

Table 4: No. of Teachers from different discipline

Science	Social science
150	250

Collection of Data & Statistical Techniques:

The field work conducted for collection of data was carried out in two phases. The investigator had to visit the seven blocks of the district. Since most of the areas under investigation were not approachable with good roads, the investigator had to move on foot in order to up- date the qualitative data. The statistical techniques were used in the present study for analyzing the data. For analyzing the data; Percentage, Mean, S.D. 't'- test and chi-square test, Anova and F-test were used.

Analysis of Data: After editing the answer sheets, the appropriate statistical techniques were employed for describing the data, analyzing the same and later for testing the hypothesis. Two types of statistical applications are relevant namely Descriptive analysis of data and Inferential analysis of data.

RESULTS AND DISCUSSION:

To study the perceptions and awareness of secondary school teachers, about environment education in Hooghly district of West Bengal, the data were analyzed by using t-test followed by F-value. The t-values are compared by the mean variance within and among the group.

Details are given in table no. 5, 6 and 7.

Table No. 5

Environmental Awareness score of teachers on EATT

Area	**No. of teachers**	**Mean**	**Std. Deviation**	**Std. Error Mean**
O_Score Tarakeswar Arambagh	256	40.07	6.558	.410

*O_ Score= Overall environment awareness score

Table No. 6

Mean, SD and t of teachers on EATT

	Levene's Test for Equality of Variances		**t-test for Equality of Means**				
	t	**Df**	**Sig. (2-tailed)**	**Mean Difference**	**Std. Error Difference**	**95% Confidence Interval of the**	
	Lower	Upper	Lower	Upper	Lower	Upper	Lower
O_Score							
Equal variances assumed	.799 **NS**	398	.460	.499	.675	1.827	.828
Equal variances not assumed		304.814	.456	.499	.669	1.815	.817

*O_ Score= Overall environment awareness score

NS. Non-Significant,

* Significant at 0.01 Level

** Significant at 0.05 Level

From table, it can be seen that, t-value was not found significant (t= .799, df = 398) on the environment awareness score of secondary school teachers, parents and administrators Hooghly district of West Bengal State. The mean values for environment awareness score Tarakeswar area teachers is 40.07 and for Arambagh is 40.57, showed no significant difference for overall environment awareness score on the basis of the area. Thus, the null hypothesis, namely 'There will be no significant difference of perceptions and awareness of secondary school teachers about environmental education in Tarakeswar and Arambagh blocks of Hooghly District of West Bengal.' is rejected even at 0.01 and 0.05 level.

Table No. 7

F-value of Environmental Awareness Score of teachers on EATT

Group	**Sum of Squares**	**Df**	**Mean Square**	**F**	**Sig.**
Between Groups				.546	
Within Groups	22.960	1	22.960	NS	.460
Total	16722.040	398	42.015		
	16745.000	399			

NS. Non-Significant,

* Significant at 0.01 Level

** Significant at 0.05 Level

Table showed about the F-value on the environment awareness score of secondary school teachers Hooghly district of West Bengal State. The F-value found .546 with degree of freedom 1/398, which is not significant even at 0.05 levels against table value. The sum of squares between the group is 22.96 and among the group is 16722.040. It means the formulated null hypothesis is accepted as "There will be no significant difference of perceptions and awareness of secondary school teachers about environmental education in Tarakeswar and Arambagh blocks in Hooghly district of West Bengal.". Both the t-test value and followed by F- value through ANOVA test accepted the formulated hypothesis against the objective one of the studies. It showed, in both the district perception awareness of secondary school teachers, parents and administrators towards environment education not differing each other.

Findings:

It is found that, in both the blocks (Tarakeswar and Arambagh) of Hooghly district of West Bengal perceptions and awareness of secondary school teachers towards environmental education not differing each other.

To study the perceptions and awareness of secondary school teachers, belonging to different discipline (science and social science) about environment education in Hooghly district of West Bengal, the data were analyzed by using t-test followed by F-value. The t-values are compared by the mean variance within and among the group. Details are given in table no. 8, 9 and 10.

Table No. 8

Environmental Awareness Score of teachers on EATT

Teachers	N	Mean	Std. Deviation	Std. Error Mean
O_Score Science	150	40.46	6.175	.856
Social Science	250	40.17	6.544	.890

*O_ Score= Overall environment awareness score

Table No. 9

Independent t-value of Environment Awareness Score

	Levene's Test for Equality of Variances		t-test for Equality of Means			
	t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference

		Lower	Upper	Lower	Upper	Lower	Upper	Lower
O_S core	Equal variances assumed	.517	399	.812	.295	1.237	2.158	2.748
	Equal variances not assumed							

*O_ Score= Overall environment awareness score
NS. Non-Significant,

* Significant at 0.01 Level

** Significant at 0.05 Level

From table, it can be seen that, t-value was not found significant (t= .517, df = 1/399) on the environment awareness score of secondary school teachers, belonging to different discipline in Hooghly district of West Bengal. The mean values for environmental awareness score of science teachers, is 40.46 and for social science is 40.57, shows no significant difference for overall environment awareness score on the basis of the different discipline. Thus, the null hypothesis, namely 'There will be no significant difference of perceptions and awareness of secondary school teachers, belonging to different discipline about environmental education in Hooghly District of West Bengal.' is rejected even at 0.01 and 0.05 level.

Table No. 10

F-value of Environmental Awareness Score of teachers on EATT

	Sum of Squares	**df**	**Mean Square**	**F**	**Sig.**
Between Groups	2.303	1	2.303	.057	.812
Within Groups	4214.423	399	40.523		
Total	4216.726	400			

NS. Non-Significant,

* Significant at 0.01 Level

** Significant at 0.05 Level

Table showed about the F-value of the environment awareness score of secondary school teachers, belonging to different discipline in Hooghly district of West Bengal. The F-value found .057 with degree of freedom 1/399, which is not significant even at 0.05 levels against table value. The sum of squares between the group 1s 2.303 and among the group is 4214.423. It means the formulated null hypothesis is accepted as "There will be no significant

difference between the perceptions and awareness of secondary school teachers, belonging to different discipline about environmental education in Hooghly district of West Bengal." Both the t- test value and followed by F-value through ANOVA test accepted the formulated hypothesis against the objective two of the study. It shows, that the perceptions of teachers towards environmental education belonging to different discipline not differing each other.

Findings:

It is found that the perceptions of teachers towards environmental education belonging to different discipline not differing each other.

CONCLUSION:

Environmental education is the process of identifying ideals and clarifying concepts in order to develop the skills and attitudes needed to understand and appreciate man's interaction with his culture and biophysical environment. Environmental education also entails decision-making practise and the creation of a personal environmental code of conduct [9-10]. Environmental education is a method of achieving environmental preservation goals. Environmental education should be carried out in accordance with the notion of lifelong holistic education, rather than as a separate field of science or subject of study.

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