



Research Paper

Influence of Settlement, Educational Qualification and Teaching Experience and Their Interactions on Environmental Awareness of Assamese medium Secondary School Teachers of Jorhat District in Assam (India)

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ABSTRACT:- The present study identifies the influence of settlement, educational qualification and teaching experience on environmental awareness among the Assamese medium Secondary School male and female teachers in Jorhat district of Assam. Environmental Awareness Scale was developed and used for collecting data from a random sample of 120 Assamese medium Secondary School teachers in Jorhat district of Assam. Three-way Analysis of Variance was applied to analyze the data. Educational Qualifications shows very high influence on the environmental awareness of Assamese medium Secondary School male and female teachers, the other variables like teaching experience and settlement of teachers does not have any influence. It may be concluded that as a whole the interaction between the variables on environmental awareness of Assamese medium Secondary School male and female teachers are insignificant.

KEYWORDS:- Environmental Awareness, Assamese Medium Secondary School, Assamese Medium Secondary School male and female Teacher.

I. INTRODUCTION

Development of science and technology made the life of man more and more comfortable. As a result of development, his dependence on environment increased. Man tried to consume more and more resources from the environment; the effect of consumption activities of man became more and more visible on his environment. With the industrial revolution, the consumption of raw materials such as wood, coal, minerals, fossil fuels etc. increased tremendously. As a result of human activities pollution of air, water and soil became visible. These results made the man conscious of his actions. Slowly man realized that the existence of his race was in danger. He also realized that to survive as a race it was necessary to educate himself about his environment; education is the only way to minimize the danger created by him. This led to the development of the concept of Environmental Education. The term environmental awareness has a broad meaning. It not only implies knowledge about environment but also values and necessary skills to solve environmental problems. Moreover, environmental awareness is the initial step ultimately leading to the ability to carry on responsible citizenship behavior (**Sengupta, Das and Maji, 2010**).

A number of research works have been taken up in this respect. But being a location specific issue, research on environmental education should be undertaken in different parts of the country for developing a clear understanding and perspective of the issues involved. Review of literature reveals that **Patel and Patel (1994)** examined the environmental awareness of 120 primary school teachers of standards I to IV and found that male teachers with long school experience, in urban areas, are more aware about the environmental education. **Patel and Patel (1995)** in a study of 100 secondary school teachers found no significant difference in environmental awareness of teachers with high and low experiences. **Pradhan (2002)** analyzed the environmental awareness among secondary school teachers and found that teachers working in secondary schools had low awareness about environmental problems. There was a significant difference in environmental awareness between social science, language and science teachers, and rural and urban teachers, while male and female teachers showed no such differences. **Shaila (2003)** studied the effect of background variables on the environmental attitude of secondary school teachers and found that there is no significant difference between male and female teachers with regard to their environmental awareness and depicted no significant difference

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between arts and science teachers. **Dhillon and Sandhu (2005)** conducted a study to assess environmental education awareness among elementary school teachers and found that there was significant difference in environmental education awareness between urban and rural school teachers. No significant difference was observed in the environmental education awareness between male and female teachers and significant difference was found among teacher with respect to their subject specialization. **Nagra (2010)** identified the environmental education awareness among school teachers in relation to level of school, residential background, gender and subject specialization. Analysis of variance results revealed significant variation in the environmental education awareness level of school teachers in relation to their level, residential background and subject specialization. However, no significant variation was observed in relation to the gender of school teachers. Another research conducted by A research survey was conducted by **Aminrad, et al. (2012)** on environmental awareness among environmental specialists and secondary school science teachers in Malaysia. The findings reflected towards moderate levels of environment awareness in both the specialists and teachers and also across the gender divides in both groups.

The above literature review reveals that most of the studies had concentrated upon the elementary or secondary level teachers and very rarely any study has concentrated upon senior secondary level teachers thus, the present study has been taken.

II. OBJECTIVES OF THE STUDY

1. To study the influence of settlement, educational qualification and teaching experience and their interactions on environmental awareness of Assamese medium Secondary School male teachers of Jorhat district in Assam.
2. To study the influence of settlement, educational qualification and teaching experience and their interactions on environmental awareness of Assamese medium Secondary School female teachers of Jorhat district in Assam.

III. HYPOTHESIS OF THE STUDY

On the basis of the objectives of the study, following hypothesis have been formulated for the present study:

1. There will be no influence of settlement, educational qualification and teaching experience on environmental awareness among the Assamese medium Secondary School male teachers in Jorhat district of Assam.
2. There will be no influence of settlement, educational qualification and teaching experience on environmental awareness among the Assamese medium Secondary School female teachers in Jorhat district of Assam.

IV. METHODOLOGY

The present investigator has followed the 'Normative' and 'Descriptive Method' of research for the present study. The 'Normative Method' suggests two aspects of the study. It refers to the gathering of the data of the current condition and on the other hand 'Normative' is used because the data collection is done frequently to ascertain the normal or typical condition or practice. Thus in the present study, the Normative Method was employed as the study require information and data regarding environmental awareness and personal information about the teacher. Data were collected by using awareness scales. The first part of this scale contains with a few questions which has given information about teaching experience, educational qualification of the teacher etc. Three-way Analysis of Variance was applied to analyze the data.

V. TOOLS USED FOR THE STUDY

The investigator developed environmental awareness Scale with the help of experts to collect data on the environmental awareness of Assamese medium secondary school teachers in Jorhat district of Assam. Environmental awareness scale was developed and standardized before administering it. Investigator collected data from different Assamese medium secondary schools in Jorhat district of Assam using the developed tool.

VI. POPULATION

In the present study, a sample was selected from the secondary schools of Assamese medium in the district of Jorhat, Assam. A sample of 120 teachers was selected by adopting the random sampling techniques. Further, selected sample was divided into two segments of 60 teachers. Here, each segment consists of teachers of rural and urban secondary schools of Assamese medium in the district of Jorhat, Assam. Equal representation of teachers has been ensured for sex and settlement in secondary schools of Assamese medium in the district of Jorhat, Assam.

VII. DELIMITATIONS OF THE STUDY

1. The study is limited to secondary schools in Jorhat district of Assam only.
2. The study is limited to 120 teachers of Assamese medium secondary school only.
3. The study is limited to the variables like Sex, Teaching experience, Educational Qualification, Settlement of the teachers.

VIII. RESULTS AND DISCUSSION

Major findings of the study is given bellow-

Table 1 (A): Summary of analysis of Environmental Awareness Test Scores of Assamese Medium Secondary School Male Teachers of High and Low Levels of Teaching Experience, Settlement and Educational Qualification.

Sl. No	Source of Variation	Sum of Square	d.f.	Mean Squares	F-value
1	T. Experience (A)	14.45	1	14.45	0.58
2	Educational Qualification (B)	12251.25	1	12251.25	495.20
3	Settlement (C)	11.25	1	11.25	0.45
4	A x B	2.45	1	2.45	0.10
5	B x C	8.45	1	8.45	0.34
6	A x C	2.45	1	2.45	0.10
7	A x B x C	26.45	1	26.45	1.07
8	Treatment within Set	1781.2	72	24.74	

$$TSS = 12316.75 - 14.45 - 12251.25 - 11.25 - 2.45 - 8.45 - 2.45 = 26.45 \quad (A \times B \times C)$$

- I. Table 1 (A) reveals that the computed 'F' value was found 0.58 relating to the variable Teaching Experience, where as the table 'F' value is 3.98 for 1/72 d.f. at .05 level of confidence. It means that that obtained F value (0.25) is smaller than the table value 3.98; it is concluded that the mean scores of Environmental Awareness of the male teachers belonging to Assamese medium secondary school belonging to high and low groups of teaching experience group do not differ significantly. In view of this the hypothesis is retained and interpreted that the variable teaching experience does not influence the Environmental Awareness of the male teachers of Assamese medium secondary schools in Jorhat, Assam.
- II. It is indicated in table 1 (A) that the obtained 'F' value is 495.20 regarding the variable of Educational Qualifications, which is higher than the table 'F' value 3.98 for 1/72 d.f. at .05 level. It means the mean scores of Environmental Awareness of the male teachers of Assamese medium secondary school belonging to high and low groups of Educational Qualifications group differ significantly. Therefore, the hypothesis has been rejected and interpreted that Educational Qualifications influence the Environmental Awareness of the male teachers of Assamese medium secondary schools in Jorhat, Assam.
- III. Table 1 (A) shows that the computed 'F' Value came out to be 0.45 regarding the Settlement variable whereas the table 'F' value is 3.98 for 1/72 d. f. at .05 level. Here, the obtained 'F' value 0.45 is lesser than the table value 3.98. Hence, it is concluded that the mean scores of Environmental Awareness among rural and urban male teachers of Assamese medium Secondary School do not differ significantly. In view of this, the hypothesis is retained and interpreted that the variable Settlement, does not influence the Environmental Awareness of the male teachers of Assamese medium secondary schools in Jorhat, Assam.
- IV. Further, the table 1 (A) indicates that the obtained 'F' values of interactions between Teaching Experience, Educational Qualifications and Settlement, were found 0.58, 495.20, and 0.45 respectively, which are lesser than the criterion 'F' value 3.98 for 1/72 d.f. at .05 level of confidence. Although Educational Qualifications shows very high influence on the environmental awareness of Assamese medium Secondary School male teachers the other variables like Teaching Experience and Settlement of teachers does not have any influence therefore it can be concluded that as a whole the interaction between these variables on environmental awareness of Assamese medium Secondary School male teachers are insignificant.

Table 1 (B): Summary of analysis of Environmental Awareness Test Scores of Female Teachers of High and Low Levels of Teaching Experience, Settlement and Educational Qualification.

Sl. No	Source of Variation	Sum of Square	d.f.	Mean Squares	F-value
1	T. Experience (A)	57.8	1	57.8	2.52
2	Educational Qualification (B)	13005	1	13005	567.90
3	Settlement (C)	9.8	1	9.8	0.43
4	A x B	23.2	1	23.2	1.01
5	B x C	0.8	1	0.8	0.03
6	A x C	0.8	1	0.8	0.03
7	A x B x C	-10.2	1	-10.2	-0.45
8	Treatment within Set	1648.8	72	22.9	

$$TSS = 13087.2 - 57.8 - 13005 - 9.8 - 23.2 - 0.8 - 0.8 = 26.9 \quad (A \times B \times C)$$

- I. Table 1 (B) reveals that the computed 'F' value was found 2.52 relating to the variable Teaching Experience, where as the table 'F' value is 3.98 for 1/72 d.f. at .05 level of confidence. It means that that obtained F value (2.52) is smaller than the table value 3.98; it is concluded that the mean scores of Environmental Awareness of the Female teachers belonging to Assamese medium secondary school belonging to high and low groups of teaching experience group do not differ significantly. In view of this the hypothesis is retained and interpreted that the variable teaching experience does not influence the Environmental Awareness of the Female teachers of Assamese medium secondary schools in Jorhat, Assam.
- II. It is indicated in table 1 (B) that the obtained 'F' value is 567.90 regarding the variable of Educational Qualifications, which is higher than the table 'F' value 3.98 for 1/72 d.f. at .05 level. It means the mean scores of Environmental Awareness of the female teachers of Assamese medium secondary school belonging to high and low groups of Educational Qualifications group differ significantly. Therefore, the hypothesis has been rejected and interpreted that Educational Qualifications influence the Environmental Awareness of the female teachers of Assamese medium secondary schools in Jorhat, Assam.
- III. Table 1 (B) shows that the computed 'F' Value came out to be 0.43 regarding the Settlement variable whereas the table 'F' value is 3.98 for 1/72 d. f. at .05 level. Here, the obtained 'F' value 0.76 is lesser than the table value 3.98. Hence, it is concluded that the mean scores of Environmental Awareness among rural and urban teachers of Assamese medium Secondary School do not differ significantly. In view of this, the hypothesis is retained and interpreted that the variable Settlement, does not influence the Environmental Awareness of the female teachers of Assamese medium secondary schools in Jorhat, Assam.
- IV. Further, the table 1 (B) indicates that the obtained 'F' values of interactions between Teaching Experience, Educational Qualifications and Settlement, were found 2.52, 567.90 and 0.43 respectively. Although Educational Qualifications shows very high influence on the environmental awareness of Assamese medium Secondary School female teachers the other variables like Teaching Experience and Settlement of teachers does not have any influence therefore it can be concluded that as a whole the interaction between these variables on environmental awareness of Assamese medium Secondary School female teachers are insignificant.

IX. CONCLUSION

The Environmental Awareness of the male teachers belonging to Assamese medium secondary school belonging to high and low groups of teaching experience group doesn't differ significantly. It may be interpreted that the variable teaching experience does not influence the Environmental Awareness of the male teachers of Assamese medium secondary schools in Jorhat, Assam. On the otherhand, the Environmental Awareness of the male teachers of Assamese medium secondary school belonging to high and low groups of Educational Qualifications group differ significantly. It may conclude from the study that the mean scores of Environmental Awareness among rural and urban male teachers of Assamese medium Secondary School do not differ significantly. Although Educational Qualifications shows very high influence on the environmental awareness of Assamese medium Secondary School male teachers, the other variables like Teaching Experience and Settlement of teachers does not have any influence on environmental awareness.

It is found that Environmental Awareness of the Female teachers belonging to Assamese medium secondary school belonging to high and low groups of teaching experience group do not differ significantly. The mean scores of Environmental Awareness of the female teachers of Assamese medium secondary school belonging to high and low groups of Educational Qualifications group differ significantly. It may conclude that the mean scores of Environmental Awareness among rural and urban Female teachers of Assamese medium Secondary School do not differ significantly. Although Educational Qualifications shows very high influence on

the environmental awareness of Assamese medium Secondary School female teachers, the other variables like Teaching Experience and Settlement of teachers does not have any influence.

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