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A STUDY OF RESPONSIBLE ENVIRONMENTAL BEHAVIOUR AMONG B. ED. DISTANCE LEARNERS WITH REFERENCE TO THEIR LOCALITY, GENDER, STREAM & SOCIO-ECONOMIC STATUS

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ABSTRACT

Humans are understood to be highly responsible for environmental degradation. However, through humans, the adverse effects could be minimised or, where possible, even restored to its former sustainable condition. The present study was undertaken to study the Responsible Environmental Behaviour among B.Ed. Distance Learners with Reference to their locality, Gender, Stream & Socio-Economic Status. The sample consisted of 100 students pursuing B.Ed. through distance mode from M. D. University, India. For obtaining the data, Responsible Environmental Behaviour Measure (REBM) developed and standardized by Sindhwani (2005) was used. Data analysis involved the use of mean scores, standard deviation and t-test.

The results of the study indicated that B.Ed Distance teacher trainees had Moderately Responsible Behaviour towards environment whereas significant differences were found in Responsible Environmental Behaviour of B. Ed. Distance teacher trainees on the basis of gender, stream, locality and socio economic status.

Keywords: Environmentally responsible behaviour, B.Ed distance learners

INTRODUCTION

***The environment is everything that affects the individual except his genes"*.**
-Wordsworth

The most severe and enduring threat facing the world is the danger that human actions are producing irreversible harmful changes to the environmental conditions that hold up and sustain life on Earth. If this problem is not overcome, there may be no viable world for our descendants to inhabit. Enormous changes to human lifestyles and cultural practices may be required to reach the goal of a sustainable level of impact on the environment—i.e., one that can be maintained indefinitely. Environment is not only the sum of all the material things that constantly interact with each other and which makeup the mosaic of the country side landscape. It is much more than this. It also includes the economic structures and the outlook and habits of the people in different parts of the world" (UNESCO, 1990).

The formal education system should aid in reaching this goal by teaching about environmentally responsible behavior.

The education should provide sound information and strengthen motivation and behavioral skills that are necessary to make the needed changes in behaviour and lifestyles. The National Policy on Education, 1986 states, "There is paramount need to create a consciousness of the Environment. It must permeate all ages and all sections of society, beginning with the child. Further, education at tertiary level should not consider only academic and professional achievements, but also an education to be a better citizen of society."

Undoubtedly, over the past decade, support has steadily grown among environmental educationists for the importance of developing individuals who behave responsibly towards the environment (Stapp, 1969, Hendce 1972, Wert 1976). This support has grown to such an extent that it can now be said that the development of environmentally responsible behavior and active citizen has become the ultimate goal of environmental education (Hungerford & Peyton 1976). Despite this agreement the goal has yet not been achieved (Hungerfold & Wolk 1983).

The teacher education programmes, in particular, need to work in the direction and develop an attitude of responsible behavior among its learners. This is because the teachers carry the legacy to the future generation. If the teachers are able to bring in attitude change and make them more responsible, then half the battle is won. The attitude change positively leads to the potential change towards responsible environmental behaviours. Mathews and Riley (1995) revealed that increase in knowledge lead to change in attitude, which in turn influence behavior. Jain (1990) studied Environmental Education in Nigerian School emphasizing the need to give more weightage to the practical aspects of science and reported that the time devoted to the teaching of natural science was less, compared to the amount of content provided in the syllabi. He further stated that lack of well-qualified teachers and laboratories are the major problems in effective teaching and greater emphasis on the environmental sciences would establish human attitude for wide use of natural resources. Shahnawaj (1990) conducted a study on Environmental Awareness and Environmental Attitude of Secondary and Higher Secondary School Teachers and Students and the major findings of the study were that 95% teachers and 94% students possessed positive environment attitudes and teachers had more awareness of environment than students.

Praharaj (1991) explored the level of environmental knowledge, attitude and its perception among Pre-service and In-service Secondary school teachers in Puri district and stated that the level of environmental knowledge was low among Pre-service teachers although conceptual knowledge was moderate whereas among the In-service teachers, environmental knowledge was moderate and factual knowledge about the environment was low as well as mass media had a potential role to play in imparting environment education and teachers perceived that Environmental Education could be a core part of social science and general science. Sahoo (1992) implies that man's domination over the environment has created complexities in the man-environment relationship and self-management is the best formula for good environmental management.

BACKGROUND OF THE STUDY

Teacher education in India is provided through both Regular and Distance mode. Generally those pursuing through distance mode are in-service teachers but that is not always the case. Under such circumstances it becomes important to ascertain the 'responsible environment behaviour' of the teachers trainees who are pursuing their Bachelors in Education (B.Ed) through the distance mode.

Keeping in view the above facts the investigators felt it appropriate to investigate responsible environmental behaviour among B.Ed. distance learners with reference to their locality, gender, stream & socio-economic status.

The present research was designed to answer the following research questions:

- **Is there any difference in the level of Responsible Environmental Behaviour (REB) of rural and urban B.Ed. Distance teacher trainees?**
- **Is there any difference in the level of Responsible Environmental Behaviour (REB) of Arts & Science B.Ed. Distance teacher trainees?**
- **Is there any difference in the level of Responsible Environmental Behaviour (REB) of male and female B.Ed. Distance teacher trainees?**
- **Is there any difference in the level of Responsible Environmental Behaviour (REB) of High socio economic status and low socio economic status B.Ed. teacher trainees?**

OBJECTIVES OF THE STUDY

The objectives of the study were:

- **To study the level of Responsible Environmental Behaviour (REB) among B.Ed. Distance Learners.**
- **To compare the level of Responsible Environmental Behaviour (REB) among B.Ed. Distance Learners on the basis of locality.**
- **To compare the level of Responsible Environmental Behaviour (REB) of B.Ed. Distance Learners on the basis of stream (Arts & Science).**
- **To compare the level of Responsible Environmental Behaviour (REB) among B.Ed. Distance Learners on the basis of gender.**
- **To compare the level of Responsible Environmental Behaviour (REB) of B.Ed. Distance Learners on the basis of socio-economic status.**

METHOD

The design applied in this study was Normative Survey Method

Sample and sampling procedure

A sample of 100 B.Ed Distance teacher trainees was researched on and the sample was selected through Random sampling technique.

The distribution of the sample is given in details in the following table (Table: 1).

Table: 1
Distribution of sample

Stream		Locality		Gender		Socio-Economic Status	
Arts	Science	Rural	Urban	Male	Female	High ES	Low SES
53	47	50	50	48	52	47	53

The population in this study constitutes teacher trainees pursuing the B.Ed. course through Distance Mode from Maharshi Dayanand University, Rohtak having center for CCP (compulsory contact program) held from Dec. 3, 2012 to Dec. 26, 2012 in Vaish College of Education, Rohtak, Haryana India.

Tools Used

For ascertaining the responsible environmental behavior of teacher trainees, a standardized scale 'Responsible Environmental Behaviour Measure' (REBM) developed and standardized by Sindhwani (2005) was used to collect the data. The Scale consisted of 25 questions related to seven dimensions of environment. Each question was provided with four options such as never, sometimes, often and always. The range of scores of REBM varied between 25 to 100. The highest scores indicated extremely responsible behaviour towards environment and lowest score indicated irresponsible behaviour towards environment. Two test-retest reliability was determined for the construction of the scale; one after an interval of three months and other of 6 months and the values were found 0.79 and 0.77 respectively. Split half reliability was found to be 0.83.

Data Collection

In order to assess the level of Responsible Environmental Behaviour among B.Ed Distance Learners, REBM was distributed to them during CCP. To ensure quick and complete return, tests were personally given to the selected sample of Distant Teacher trainees. Before giving the tests, a rapport was established with the them. The teacher trainees were asked to fill up the personal information and respond to each question honestly, sincerely and truthfully.

Data Analysis

Scoring of the responses was done as per the instructions given in the manual. Then raw scores obtained were presented in tabulation for the purpose of interpretation. For the interpretation of data, the means, standard deviations and the difference of means were computed. The collected data was subjected to statistical analysis. Significance of difference between the mean scores was tested by applying t-test.

FINDINGS AND DISCUSSION

The findings after analyzing the data have been presented in the following headings for better comprehensibility of the readers.

Responsible environmental behavior of B.Ed distance learners

As evident from Table 2, the mean performance scores of B. Ed. Distance teacher trainees on REBM are 72 and 10.95 respectively. As the obtained mean scores fall in the second category of the measure having score range from 63-85, this can be safely interpreted that B. Ed. Distance teacher trainees affiliated to M. D. University, India have been found to exhibit Moderately Responsible Behaviour towards environment.

Table: 2
Responsible Environmental Behaviour of B.Ed. Distance Learners

Variable	N	Mean	S.D.	Interpretation
Responsible Environmental Behaviour	100	72	10.95	Moderately Responsible Behaviour

It could be ascribed to various reasons perhaps, inadequate knowledge and practical training, insensitivity towards environmental conservation, urge for easy going life style. The students know about the environment and it's concerning issues and problems. Even though the government introduced environmental education from lower level of schooling, the students are not caring about their surrounding environment.

One of the reasons for moderate responsible environmental behaviour of B.Ed. Distance Learners may be their inadequate knowledge of environmental management practices and gap between theory and practice as there is a positive relationship between knowledge, skill and scientific temperament (Singh 1998). Another reason for the moderate performance can be explained in words of Rekha (2004) who found that institutional environmental plays a key role in developing attitudes and values towards responsible environmental behaviour.

Difference In Responsible Environmental Behavior of B.Ed Distance Learners On The Basis of Locality

From Table 3, it can be seen that mean scores of rural and urban B.Ed. Distance Learners were 69.9 and 74.2and the obtained t- value is significant at the 0.05 level of significance. The result shows that there exists significant difference in the level of Responsible Environmental Behaviour (REB) among B.Ed. Distance Learners on the basis of locality. Since their mean scores fall in the second category of the REBM ranging from 63-85 scores, both the groups have been found to exhibit moderately responsible behavior but urban B.Ed. teacher trainees have more responsible environmental behaviour than their rural counterparts.

Table: 3
Difference in Responsible Environmental Behaviour of B. Ed. Distance Learners on the basis of Locality

Variable	Group	N	Mean	S.D.	t-value
Locality	Rural	50	69.9	5.76	2.11*
	Urban	50	74.2	4.18	

*** Significant at 0.05 level of significance**

The results indicate that urban teacher trainees have better level of responsible environment behaviour than their rural counterparts. Rural students generally have low level of environmental awareness may be due to improper guidance from teachers. The results are in the consonance with the findings of Braham et al (2005) that urban students had more interest in environmental matters than their rural counterparts.

The results are further substantiated by the findings of Mary and Raj (2005) that the locality of the school influences the environmental awareness and responsibilities among the students. However, Gupta et al (1981) studied the awareness of environment among students of rural and urban schools and non-formal education centers of class IV and revealed that school going rural children did better than the urban children, also non-formal center students were more aware than that of urban students. Sarala (2008) also reported that students from rural areas had more environmental awareness than the students from urban areas.

Difference in responsible environmental behavior of B.Ed distance learners on the basis of stream

The perusal of Table 4 indicates that the mean scores of Arts and Science B.Ed. Distance Learners were 70.32 and 74.39 respectively. The obtained t- value was 2.56 which is significant at the 0.01 level of significance. The result shows that there exists significant difference in the level of Responsible Environmental Behaviour (REB) among B.Ed. Distance Learners on the basis of stream. Since their mean scores fall in the second category of the REBM ranging from 63-85 scores, both the groups have been found to

exhibit moderately responsible behavior but Science B.Ed. teacher trainees have more responsible environmental behaviour than Arts B.Ed. teacher trainees.

Table: 4
Difference in Responsible Environmental Behaviour of B. Ed. Distance Learners on the basis of Stream

Variable	Group	N	Mean	S.D.	t-value
Stream	Arts	53	70.32	5.13	2.56**
	Science	47	74.39	2.98	

** Significant at 0.01level of significance

The significant difference could be ascribed to various reasons, primary among them is that the Science students have more exposure to environment related issues in their curriculum than Arts students. The results are in consonance with the findings of Sebastian, S. and Nima, D.S. (2005), Madamala (2008) and Pandiar & Godiyal (2008) who found that science students had clear knowledge about the meaning and concept of environment, knowledge relating to different aspects of pollution and attitude and awareness of practices conducive to the protection of the environment.

Difference in responsible environmental behavior of B.Ed distance learners on the basis of gender

From Table 5 it is evident that mean scores of male and female B.Ed. Distance teacher trainees were 69.2 and 73.4 and S.D. as 6.06 and 4.09 respectively. The obtained t- value was 5.59 which is significant at the 0.05 level of significance. The result shows that there exists significant difference in the level of Responsible Environmental Behaviour (REB) among B.Ed. Distance Learners on the basis of gender. Since their mean scores fall in the second category of the REBM ranging from 63-85 scores, both the groups have been found to exhibit moderately responsible behavior but female B.Ed. teacher trainees have more responsible environmental behaviour than male B.Ed. teacher trainees.

Table: 5
Difference in Responsible Environmental Behaviour of B.Ed. Distance Learners on the basis of Gender

Variable	Group	N	Mean	S.D.	t-value
Gender	Male	48	69.2	6.05	5.59**
	Female	52	73.4	4.09	

** Significant at 0.01 level of significance

Now-a-days, the parents are treating boys and girls equally but even then most of the girls spend their leisure time at home taking care about each and everything at home like home decoration, cooking, gardening, showing interest towards the protection of environment by planting trees. But males hardly show any interest towards plantation or environment protection.

The findings of the study are corroborated with the findings of Shanaway (1990), Rou (1995), Sabhlok (1985), Patel (1995), Szagun (1995), Nima (2005), Kumari et al (2006) who reported that gender has an effect on the level of responsible environmental behaviour. Nagasubramani and Kulasekaraperumal (2010) indicated that the knowledge of environment protection was high among females.

Difference in responsible environmental behavior of B.Ed distance learners on the basis of socio-economic status

Table 6 indicates that mean scores of B.Ed. distance learners having high socio-economic status and low socio-economic status were 78 and 67 and S.Ds. as 5.92 and 11.21 respectively.

The obtained t- value was 6.25 which is significant at the 0.01 level of significance. The result shows that there exists significant difference in the level of Responsible Environmental Behaviour (REB) among B.Ed. Distance Learners on the basis of Socio-economic status. Since their mean scores fall in the second category of the REBM ranging from 63-85 scores, both the groups have been found to exhibit moderately responsible behavior but B.Ed. teacher trainees of High socio-economic status were found to have better level of responsible environmental behaviour than B.Ed. teacher trainees of low socio-economic status.

Table: 6
Difference in Responsible Environmental Behaviour of B.Ed. Distance Learners of different Socio-Economic Status

Variable	Group	N	Mean	S.D.	t-value
Socio-economic status	High	47	78	5.92	6.25**
	Low	53	67	11.21	

****Significant at 0.0 level of significance**

The findings revealed that High Socio-economic Status B.Ed. Distance Learners are more responsible to environment than Low Socio-economic Status B.Ed. Distance Learners. The finding is consistent with that of Nassema (2006) who concluded that the influence of both physical and psychological environment which are caused due to socio-economic conditions of the family, parents education, home conditions of living, parents love, care arid incentives along with the cultural forces provide a result out affect on the pupils' acquisition of environmental concepts. Singh (1991) & Fisman (2005) also revealed that environmental awareness was high among the people of high socioeconomic class.

OVERVOIEW – Young students need to be taught about environment and a responsible environment behavior needs to be inculcated in them. This can be done in the most effective manner through their teachers. So the teachers too need to carry that kind of attitude and thus teacher education programme too needs to be sensitive for that. Although positive environmental attitudes, once acquired, seem to be long lasting (Iozzi, 1989), some sort of intervening reinforcement is generally needed to maintain the concern and original level of involvement (Hungerford and Volk, 1990).
For that the government should give special allowances, incentives and promotions to the teachers those who are trying to bring environmental awareness among students. For creating responsibility and environmental awareness various campaigns and competitions can be launched from time to time for students and teachers as well. Fundamentally, the local community, families, governmental agencies, and religious organisations, should also be involve by creating positive life-long learning environments. With all supports of a local situation, the learning lessons from the class will construct positive attitudes and actions of the learners, so they can live their whole life in a sustainable way and be a proper member of a society that they belong to (Hengrasmee, S. & Chansomsak, S.)

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