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Environmental Awareness Among Upper Primary School Teachers

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Abstract: The present study is an attempt to identify the environmental education awareness of upper primary school teachers (Grade VI to VIII) in relation to type of school, gender and subject streams. Environmental Awareness Test was used for collecting data from a random sample of 200 upper primary school teachers. Statistical techniques such as mean, standard deviation and t test were applied for analysis of data. The results revealed that upper primary school teachers have average level of environmental education awareness. However, no significant differences were observed in environmental education awareness of these teachers in relation to type of school, gender and subject streams.

Keyword: Environmental education awareness, Upper primary school teachers, Type of school, Gender, Subject stream.

INTRODUCTION:

Man has become the ruler of nature by captivating its resources and utilizing them to the fullest extent possible at his own wishes. The degradation of environment is the foremost problem that had come to the forefront of humanity and is the result of human interferences and violation. The entire nature has reached at the threshold of destruction and the only remedy lies in the hands of human. Time has arrived where man has to think rationally and act purposefully to prevent and preserve the quality of nature for now as well as for the future. In this regard, education is obviously a powerful vehicle and a panacea of all evils that can educate the masses about the environmental problems and can undoubtedly bring major changes in their attitudes and behaviour. Environmental education has become even more important in this aspect as it develops a sense of concern for what is happening on a local and global scale and also encourages for taking appropriate actions. Environmental education increases people's knowledge and awareness about the environment and associated challenges, develops necessary skills and expertise to address challenges, and fosters attitudes, motivations, and commitments to make informed decisions for responsible action (UNESCO, Tbilisi Declaration, 1978). Not just education but mass media too have significant impact upon the attitude and behaviour of people towards environmental issues (Ostman & Parker, 1986; Srichai, 1989; Graumann & Kruse, 1990; Brothers et al., 1991; Hausback et al., 1992; Chan, 1996, 1999).

In India, the Hon'ble Supreme Court (22nd November, 1991) directed the state governments and education boards to introduce environmental education as a compulsory subject at all levels of education (school and colleges) and also entrusted the responsibility to NCERT (National Council of Education Research and Training) (18th December, 2003) for preparing the syllabus for environmental education at different level of school education (class I to XII). Accordingly, the teacher at the primary level has to concentrate upon maximum utilization of school and home surroundings as well as other settings in order to promote awareness and appreciation about the local environment. At the upper primary level, the teacher has to involve students to participate in simple projects related to different environmental issues and problems while at the secondary stage, they have to be introduced with real life situations and opportunities for community based environmental action. At the senior secondary level, students have to be moved to real life settings where environmental problems are a reality and accordingly an action through extension work has to be taken.

Although effort to introduce environmental education as a subject in the school curriculum have been made but still the subject faces certain limitations with regard to its proper implementation. The loophole surely lies in the lack of an appropriate environmental interest and attitude of the teacher towards this subject. It has been found that the teachers are not wholeheartedly ready to go beyond regular class schedules due to some constraints or so and even it becomes difficult for them to adjust the specific environmental activities in the regular course schedule (Sonowal, 2009). Studies have even proved that there exists significant discrepancy between attitudes and actual behavior of people (Chan, 1999). It is a general assumption that increased environmental knowledge will automatically lead to environmental awareness that will in turn lead to pro-environmental attitudes and overall behaviour change towards environment. The teacher should be aware of the environmental education aspects, only then s/he can convince the society about the urgency of environmental

education and make the future generations aware of the environmental problems and their solutions. Not only s/he should develop a positive attitude but also should actually practice environmental protection behavior. This will truly help in developing similar attitudes and actions in the children also.

Review of literature reveals that almost all the studies concentrate upon analyzing environmental awareness, attitude, interest, behavior, literacy of the teachers teaching at various levels such as primary level (I to IV), secondary level, higher secondary level and college level (Shahnawaj, 1990; Patel & Patel, 1994,1995; Todt, 1996; Patel, 1999; Owens, 2000; Pradhan, 2002; Shaila, 2003; Sandhu & Dhillon, 2005; Shobeiri et. al., 2006; Larijani & Yeshodhara, 2008; Nagra, 2010; Nagra & Singh, 2013). Rarely any study has been conducted to analyse the environmental awareness of upper primary school teachers (VI to VIII) in relation to type of school, gender and subject streams. Taking into consideration this situation, the investigator felt a need to conduct a study to examine the environmental education awareness level among upper primary school teachers and whether type of school, gender and subject stream have any effect on these teachers' environmental education awareness. It is possible that the results of the study can help us in suggesting appropriate strategies to improve their awareness level, to take necessary actions to come forward with prolific results to enhance the efficacy of the content as well as to sustain the inner urge for desirable actions.

HYPOTHESES

Following hypotheses are framed to test the objectives of the study:

1.There will be average environmental education awareness among upper primary school teachers.

2.There will be no significant difference in the environmental education awareness of government and private upper primary school teachers.

3.There will be no significant difference in the environmental education awareness of male and female upper primary school teachers.

4.There will be no significant difference in the environmental education awareness of science and arts upper primary school teachers.

METHOD

Sample: The study was conducted on a random sample of 200 upper primary school teachers selected randomly from the detailed list of all the government and private schools of the Hoshiarpur city.

Tools: Environmental education awareness level was measured by using Environmental Education Awareness Test by Vipinder Nagra (2010). The test is standardized and consists of 100 multiple choice items with four options and the respondent has to choose the correct one. Each correct answer is scored as 1 and each incorrect item is scored as 0. The maximum score a subject can score is 100. The reliability coefficient is found to be 0.99 and the value of suitability ranges from 0.97 to 1 which shows that the test has content validity and concurrent validity is 0.63.

Statistical Techniques: The data collected through the tool was subjected to statistical analysis and results were drawn out. Mean and Standard deviation of the total sample and relevant sub samples was computed and group comparisons were done by applying t tests.

RESULTS

The classification of total sample (N=200) as well as the sub samples on the basis of environmental education awareness is shown in Table 1. 25% of teachers fall in the category of very high environmental awareness, about 11% in the range of high environmental awareness, 10% in above average range, 16% in the range of below average, 13% in below average, 7% in low range and 18% in very low range.

Table 1. Classification of Upper Primary School Teachers on the Basis of Environmental Education Awareness Level

Groups	*Very High*	*High*	*Above Average*	*Average*	*Below Average*	*Low*	*Very Low*
	68 & above	62-67	56-61	47-55	41-46	35-40	34 & below
Total sample	51	22	20	32	27	13	35
Govt.	26	14	13	18	16	7	16
Private	26	14	11	20	11	6	12
Male	24	11	14	16	13	5	17
Female	29	15	12	10	12	6	16
Science	33	12	11	10	11	5	18
Art	20	12	12	19	15	6	16

Table 2. Comparisons of Total Sample and Sub Samples for Environmental Education Awareness

Sub- Samples	*Total (N)*	*Mean (M)*	*Standard deviation ( )*	t-value
Total Sample	200	50.63	9.62	
Government	100	51.67	9.65	1.42
Private	100	49.6	10.9	
Male	100	50.94	10.05	0.41
Female	100	50.33	10.68	
Science	100	53.73	10.98	1.02
Art	100	52.08	6.34	

The data from Table 2 highlight that the mean calculated for the whole sample is 50.63 and standard deviation is 9.62. The mean score of the total sample (N=200) falls in the average range level which suggests that upper primary school teachers have average environmental education awareness level. The Hypothesis 1 formulated in this context is therefore, accepted.

Results from Table 2 highlight the comparison between government and private school teachers with

respect to their environmental awareness. It is evident from the table that there exists no significant difference between government and private teachers (t= 1.42; p>.01) in their environmental awareness. This insignificant result shows that both government and private upper primary school teachers are equally aware about environment. Hence, hypothesis 2 is accepted.

Table 2 also represents the comparisons between male and female teachers with respect to their environmental awareness. It is evident from table that there exists no significant difference between male and female teachers (t= 0.41; p > .01) in their environmental awareness. This insignificant result shows that both male and female teachers have almost equal environmental awareness. Hence, hypothesis 3 is accepted.

Similarly, Table 2 also represents the comparison between science and art teachers with respect to their environmental awareness. Results depict that there exists no significant difference between science and art teachers (t= 1.02; p >.01) in their environmental awareness. This insignificant result concludes that both science and art teachers have almost equal environmental awareness. Hence, hypothesis 4 is accepted.

CONCLUSIONS AND DISCUSSION

Following are the major conclusions of the study:

The upper primary school teachers of Hoshiarpur city possess average awareness towards environmental education. The reason behind the average environmental education awareness level of upper primary school teachers can be attributed to the fact that environmental education has been introduced as a compulsory subject in the curriculum right from the primary level and the teachers remain in touch with the environmental content while teaching this subject. They thus, seek ample knowledge and information about environmental concepts, its importance, problems and solutions. Results of study conducted by Nagra & Singh (2013) on senior secondary school teachers also reveal same results highlighting average environmental education awareness level.

There is no significant difference in the environmental education awareness among upper primary school teachers with respect to type of school. The teachers in both government and private schools are equally aware about environmental concepts as the schools, whether government or private, follow same environmental education curriculum. The teachers have easy access to sources that help them update their knowledge through radio, television, magazines, newspapers, journals, internet, etc. The results of the study conducted by Gupta (1997) and Nagra & Singh (2013) are also in line with the findings of the present study.

There is no significant difference in the environmental education awareness among upper primary school teachers with respect to gender. The main reason for almost equal environmental awareness of male and female teachers can be due to the reason that teachers irrespective of gender have access to similar type of opportunities (same environmental education curriculum, mass media, etc.) to update their awareness regarding environmental issues. The subject being part of the curriculum provides opportunity for the teachers to learn and to participate in environment oriented activities. Studies conducted by Arcury et al., (1987), Mohai, (1991), Pardhan (2002), Shaila (2003), Lavega (2004), Sandhu & Dhillon (2005), and Nagra & Singh (2013) also found no significant effect of gender on the environmental concerns.

There is no significant difference in the environmental education awareness among upper primary school teachers with respect to stream. Environmental education is an interdisciplinary subject drawing relevant attention and concern from various fields. The content of the subject is not just limited to science stream but is also part of other subjects also. Thus, both science and art teachers are able to get relevant information about environmental issues in a similar way. Easy access to mass media too can be a significant source of information in these teachers. Studies conducted by Shaila (2003) and Nagra & Singh (2013) also highlight that streams do not have significant difference upon environmental attitude.

EDUCATIONAL IMPLICATIONS

The problem of environment abuse is a serious one and needs to be addressed at the local, national and international levels. Teacher being an effective tool in this regard can explore environmental issues and their solutions; can also do a lot of readings with the help of information technology to increase their knowledge about global and local environmental concepts. If the teacher is aware only then s/he can make the childrens aware about the environmental issues, their effects and solutions. Teachers should update his knowledge through mass media, should be member of environment related clubs, linked directly and indirectly with local or national environmental education teacher associations and welfare organizations. The government must restructure and enrich both in-service and pre- service teacher education programmes with environmental awareness activities. More and more lectures, seminars, courses, debates, declamations, posters and painting, essay writing competitions, innovation from disposed items, or reciting environment related poetry, celebrating environmental days or week can be introduced in this regard.

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