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## **A comparative study of environmental awareness of boys and girls of secondary and higher secondary schools**

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### **Abstract**

Environment means all those external forces, effects and situations which affect life, behaviour, aptitude, development and maturation of an organism. (Duglus and Holland). Environmental awareness means to help social groups and individuals to acquire an awareness of and sensitivity to the total environment and its allied problems. The study attempted to find out the environmental awareness of secondary and higher secondary school students. This was an empirical research with a sample of 200 senior secondary and higher secondary school students selected randomly from Gurgaon and Rewari district of Haryana. The study was conducted through normative survey method and environmental awareness aptitude measure test by Dr. Parveekumarjha (1998) was used for the collection of data. The major findings of the study are: 1) There is no significant difference between environment awareness of secondary level boys and girls. 2) There is significant difference between Environmental Awareness of secondary level boys and girls. 3) There is no significant difference between the Environmental Awareness of higher secondary level and secondary level boys. 4) There is significant difference between the Environmental Awareness of girls at secondary level and higher secondary level.

**Keywords:** Environmental awareness, secondary and higher secondary schools students

### **Introduction**

Environment has influenced and shaped our lives since the time immemorial. It is from the environment that we get our food to eat, water to drink, air to breath and all the necessities of day today life, thus constituting it as a life support system. Through the process of natural selection and elimination it is environment only which has caused the evolution of biological spectrum, the biosphere as it exists today. Today environment has become the concern of all the academicians, intellectuals, scientists, policymakers and government across the continents (Kant and Sharma, 2013). Since the environmental education is the application of knowledge from different disciplines to study and manage the environment and it is socially more relevant today than the past as it helps us to know how unchecked and unplanned development pollute sour air, water and soil and therefore threatens our subsistence and existence (Arun kumar, 2012). On the other hand environmental awareness helps social groups and individuals to acquire an awareness of sensitivity to the total environment and its allied problems. It is not only a question of air and water pollution but also includes elimination of diseases, hunger, malnutrition and poverty, destruction of forests, extermination of wildlife, erosion of soil and accumulation of waste and many more. Hence, there is an urgent need for the proper management of environmental crisis before it threatens our existence. World educators and environmental specialists have repeatedly pointed out that a solution to environmental crises will require an environmental awareness which should be deeply rooted in the education system at all levels of school education (Khan,! 2013). The term 'Environmental Awareness' has a broad connotation. It not only implies knowledge about environment but also attitude, values and necessary skills to solve environment related problems. Moreover, environmental awareness is the initial step ultimately leading to the ability to carry on responsible citizenship behaviour.

Sex of the pupils do not have major role in the formation of attitude towards environment. 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 and incentives along with the cultural forces provide a result out affect on the pupils acquisition of environmental concepts (Naseema, 2006) [30]. Boys and girls have intermediately attitude towards environment and they were also equally aware about the responsibilities of individual towards environment and its conservation (Kumari *et al.*, 2006). Environmental awareness was more among boys of better socio-economic status whereas among girl, it was observed that the girls of lower socio-economic status had more environmental awareness as compared with boys. (Paramjit, 1993). Institutional environment plays a key role in developing attitudes and values towards responsible environmental behaviour (Rekha, 2004) [38]. Locality of the school influence the Environmental awareness and responsibilities among the students (Sahaya Mary, R. and I Paul Raj, 2005). Sex of the pupils do not have major role in the formation of attitude towards environment. 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 and incentives along with the cultural forces provide a result out affect on the pupils acquisition of environmental concepts (Naseema, 2006) [30].

### Statement of the Problem

The study focuses on the topic entitled, "A Comparative study of environmental awareness of Boys and Girls of Secondary and Higher Secondary Schools."

### Objectives

The objectives set for the present study undertaken are as following:

- To compare the Environmental Awareness of boys and girls at secondary level.
- To compare the Environmental Awareness of boys and girls at higher secondary level.
- To compare the Environmental Awareness of secondary level and higher secondary level of boys.
- To compare the Environmental Awareness of secondary level and higher secondary level of girls.

### Hypotheses

The Hypotheses formulated for the present study are as following:

- There is no significant difference between the Environmental Awareness of boys and girls at secondary level.
- There is no significant difference between the Environmental Awareness of boys and girls at higher secondary level.
- There is no significant difference between the Environmental Awareness of boys and girls at higher secondary level of boys.
- There is no significant difference between the Environmental Awareness of boys and girls at higher secondary level of girls.

### Methodology of Study

Research methods are no more than the tools of the trade. Research method refers to the methods, the researcher use in performing research operations. This is an unfortunate tendency to think that research begins and ends with methodology. This is just not so. In the present study, normative survey method has been adopted as it is most appropriate method for such types of studies.

### Tools used in the Study

In this study, we use environmental awareness aptitude measure test by Dr. Parveen Kumar Jha. This is systematically composed questionnaire having 51 items. Out of these 43 items have been worded positively and 8 items have been worded negatively. Its split half reliability has been reported to be .61. It was found to be .84 by K.R method. The validity of the test has been reported .83.

### Sample for the Present Study

In the present study, random sampling technique was used to select the sample of 200 students studying in secondary and higher secondary schools. There were further stratified on the basis of male and female students. Out of 200 students, 100 students taken were secondary schools and the rest 100 students taken were higher secondary schools.

### Statistical Techniques used in the Present Study

By direct administration of the test data were collected from the students of secondary and higher secondary schools by investigator. Mean, Standard deviation and 't' test were the statistical techniques used for carrying out the analysis and interpretation of the data collected.

### Delimitation

1. The present study is delimited to the students of secondary and higher secondary level.
2. The present study is delimited only to 200 selected students.
3. The present study is delimited only to two districts of Haryana i.e. Gurgaon and Rewari.
4. The present study is delimited only to 200 boy and girl students.

### Analysis and Interpretation

The data have been analysed by Mean, S.D, t-test and interpretation of data is given below.

**Table 1:** Comparison of Environmental Awareness of Secondary Level Boys And Girls

| Secondary level | N  | Mean  | S.D  | C.R   |
|-----------------|----|-------|------|-------|
| Boys            | 50 | 44.02 | 3.24 | 0.51* |
| Girls           | 50 | 44.32 | 2.49 |       |

\*Not Significant at 0.05 level

It may be observed from the table – 1, reveals that the mean scores of Environmental Awareness of boys and girls at secondary level are 44.02 and 44.32 respectively. When compared with the table value the obtained 't' value 0.51 is not significant at .01 and .05 level of significance. Therefore the null hypothesis "There is no significant difference between environment awareness of secondary level boys and girls" is retained.

**Table-2:** Comparison of Environmental Awareness of Higher Secondary Level Boys and Girls

| Higher Secondary level | N  | Mean  | S.D  | C.R   |
|------------------------|----|-------|------|-------|
| Boys                   | 50 | 44.20 | 3.27 | 3.93* |
| Girls                  | 50 | 40.92 | 4.91 |       |

\* Significant at 0.05 level

It may observed from the table – 2, reveals that the mean scores of Environmental Awareness of boys and girls at secondary level are 44.20 and 40.92 respectively. When compared with the table value the obtained ‘t’ value 3.93 is not significant at .01 and .05 level of significance. Therefore the null Hypotheses “There is no significant difference between Environmental Awareness of secondary level boys and girls”, is rejected.

**Table 3:** Comparison of Environmental Awareness of Boys At Secondary And Higher Secondary Level

| Boys                   | N  | Mean  | S.D  | C.R   |
|------------------------|----|-------|------|-------|
| Secondary level        | 50 | 44.02 | 3.24 | 0.27* |
| Higher secondary level | 50 | 44.20 | 3.27 |       |

\*Not Significant at 0.05 level

It may observed from the table – 3 that the Environmental Awareness of mean scores of boys at secondary and higher secondary levels are 44.02 and 44.20 respectively. When compared with the table value the obtained ‘t’ value 0.27 is not significant at .01 and .05 level of significance. Therefore the null Hypotheses “There is no significant difference between the Environmental Awareness of higher secondary level and secondary level boys”, is retained.

**Table-4:** Comparison of Environmental Awareness Of Girls At Secondary And Higher Secondary

| Girls                  | N  | Mean  | S.D  | C.R   |
|------------------------|----|-------|------|-------|
| Secondary level        | 50 | 44.32 | 2.49 | 4.37* |
| Higher secondary level | 50 | 40.92 | 4.91 |       |

\* Significant at 0.05 level

It may observed from the table – 4 that the Environmental Awareness of mean scores of girls at secondary and higher secondary levels are 44.32 and 40.92 respectively. When compared with the table value the obtained ‘t’ value 4.37 is not significant at .01 and .05 level of significance. Therefore the null Hypothesis “There is no significant difference between the Environmental Awareness of girls at secondary level and higher secondary level”, is rejected.

**Findings and Conclusions**

**Findings**

- The mean scores of Environmental Awareness of girls students are higher than that of the scores of boys student at secondary level but the difference is not significant. Hence the null hypothesis framed is accepted.
- The mean scores of boys are higher than that of girls at higher secondary level and the difference being significant. Hence, the null hypothesis framed in this case is rejected.
- The mean scores of higher secondary level boys are higher than the mean scores secondary level boys and the difference is not significant. Hence null hypothesis framed in this case is accepted.

- The mean scores of secondary level girls are higher than the mean scores of higher secondary level girls and the difference being significant, the null hypothesis framed in this case is rejected.

**Conclusions**

- The students at secondary level have been found not only better environmentally aware than the students at higher level but there level of awareness has been found significantly higher. This may be attributed to the fact that Pupil Teachers at secondary level students study Environment Education as a compulsory paper, which is not there at higher level.
- The boys at higher secondary school level have been found higher Environmental Awareness than those of girls at secondary level. Though the difference is very small and is not significant and this may be attributed to a chance factor.
- It has been observed in this study that the girls at higher secondary school level have been found better environmental aware than that of girls at secondary school level and the difference has been found statistically significant. Which may be attribute to the fact that girls at higher secondary level are senior to secondary level students and are more conscious about environment.
- It has been observed in this study that the girls at secondary level are better environmentally aware than that of the boys at higher secondary level. Though the differences have not been found significant and this may be attributed to a chance factor.

**Implications of this study**

The findings of the present study have been reported in the discussion earlier. However, some of its practical implications can be collected to consider its importance. On the basis of the findings of the study following implications emerge.

- Special practical activities should be included in the student education curriculum in order to bring out desirable attitudinal changes among students who in term will make efforts to bring about attitudinal changes among society.
- Environmental Education based refresher courses be devised by the State Government to be executed during summer vacations so that the latest concepts, trends and strategies in the field of environmental Educational could be taught to the school students at secondary and higher secondary level.
- Environmental Education subject courses at all levels of education be revised in the light of the latest knowledge and skills at accordingly it should be updated after every three years because due to increased population, growing needs of the people, new environmental problems are coming up. The courses should be so devised that they may inculcate environmental values among the students.
- Evaluation part of the environmental education should not go in a traditional manner. Rather it should be made more and more functional. This means every student or pupil teacher at all levels of education be assessed in terms of “what concerted contributions he or she has made towards making his or her environment clean.”

- Environmental loving activities are taken in the extra-curricular activities at all level of education. Inter-school and inter-college competitions should be organized by taking such activities. Very attractive prizes, certificates and awards be given to the winner i.e. to those who have done commendable work for preservation of the environment.

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